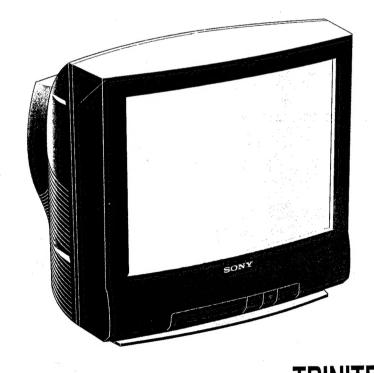
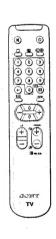
SERVICE MANUAL

BE-44 CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.	MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-21M1A	RM-836	Italian	SCC-J05E-A	KV-21M1K	RM-836	OIRT	SCC-J03J-A
KV-21T1A	RM-836	Italian	SCC-J05D-A	KV-21T1K	RM-836	OIRT	SCC-J03G-A
KV-21M1B	RM-836	French	SCC-J06G-A	KV-21M1L	RM-836	Irish	SCC-J02D-A
KV-21T1B	RM-836	French	SCC-J06F-A	KV-21T1L	RM-836	Irish	SCC-J02C-A
KV-21M1D	RM-836	AEP	SCC-J08F-A	KV-21T1R	RM-836	OIRT	SCC-J03H-A
KV-21T1D	PM-836	AEP	SCC-J08E-A	KV-21M1U	RM-836	UK	SCC-J01E-A
KV-21M1E	RM-836	Spanish	SCC-J04F-A	KV-21T1U	RM-836	UK	SCC-J01D-A
KV-21T1E	RM-836	Spanish	SCC-J04E-A		400	h. A	্দ্ৰ ক ্ষ্য হিচা হৰ শুক্









ITEM MODEL	Television System	Channel Coverage	Colour System
Italian	B/G/H	VHF: E2-E12, S1-S20 UHF: E21-E69, S21-S41 HYPER: S1-S41	PAL
French	B/G/H, L	VHF: E2-E12, F2-F10, B-Q UHF: E21-E69, F21-F69 HYPER: S1-S41	PAL, SECAM
AEP	B/G/H	VHF: E2-E12 UHF: E21-E69 HYPER: S1-S41	PAL, SECAM
Spanish	B/G/H	VHF: E2-E12 UHF: E21-E69 HYPER: S1-S41	PAL
OIRT	B/G, D/K	B/G VHF: E2-E12 UHF: E21-E69 D/K VHF: R01-R12 UHF: R21-R69 Hyper: S1-S41	PAL, SECAM
Irish UK	1	UHF: U21-U69 VHF: A-J (Irish) UHF: U21-U69 (UK)	PAL

MODEL	21M1A 21T1A	21M1B 21T1B	21M1D 21T1D	21M1E 21T1E	21M1K 21T1K 21T1R	21M1L 21T1L	21M1U 21T1U
Power Consumption	39W	58Wh	58W	58W	58W	75W	75W

SPECIFICATIONS

Picture Tube

Super Trinitron

Approx. 54.5 cm (21 inches)

(Approx. 51 cm picture measured

diagonally)

Sound output

4W (RMS)

5W (music power)

Dimensions

513x475x475 mm approx.

Weight

Approx. 21.5 kg

Supplied accessories

RM-836 Remote Commander (1)

IEC designated batteries (2)

Other features

TELETEXT (for KV-21T1 models)

Rear/Front Terminals

[REAR]

- 1 21-pin Euro connector (CENELEC standard)

- Inputs for audio / video signals

- Inputs for RGB

[RM-836]

Remote control system

Infrared control

Power requirements Dimensions 3V dc (2 batteries) R6 (size AA)

Weight

Approx. 210x45x24 mm (w/h/d)

Approx. 90g

(Not including battery)

[FRONT]

Video (phono jack)

• Audio (phono jacks)

Headhpone jack - minijack

Design and specifications are subject to change without notice.

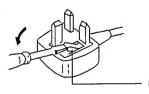
Model name	KV-21M1A KV-21T1A	KV-21M1B KV-21T1B	KV-21M1D KV-21T1D	KV-21M1E KV-21T1E	KV-21M1K KV-21T1K KV-21T1R	KV-21M1L KV-21T1L KV-21M1U KV-21T1U
PIP	OFF	OFF	OFF	OFF	OFF	OFF
MPIP	OFF	OFF	OFF	OFF	OFF	OFF
Scart 1	ON	ON	ON	ON	ON	ON
Scart 2	OFF	OFF	OFF	OFF	OFF	OFF
Front in (3)	ON	ON	ON	ON	ON	ON
Scart 4	OFF	OFF	OFF	OFF	OFF	OFF
Projector	OFF	OFF	OFF	OFF	OFF	OFF
AKB in 16:9 mode	OFF	OFF	OFF	OFF	OFF	OFF
Norm B/G/H	ON	ON	ON	ON	ON	OFF
Norm I	OFF	OFF	OFF	OFF	OFF	ON
Norm D/K	OFF	OFF	OFF	OFF	ON	OFF
Norm L	OFF	ON	OFF	OFF	OFF	OFF
Language Preset	Italian	French	German	Spanish	OIRT	English

WARNING (KV-21M1L/21T1L/21M1U/21T1U only)

The flexible mains lead is supplied connected to a **B.S. 1363** fused plug having a fuse of **5 AMP** capacity. Should the fuse need to be replaced, use a **5 AMP FUSE** approved by **ASTA** to **BS 1362**, ie one that carries the mark.

IF THE PLUG SUPPLIED WITH THIS APPLIANCE IS NOT SUITABLE FOR YOUR SOCKET OUTLETS IN YOUR HOME.

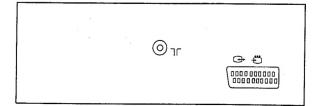
IT SHOULD BE CUT OFF AND AN APPROPRIATE PLUG FITTED. THE PLUG SEVERED FROM THE MAINS LEAD MUST BE DESTROYED AS A PLUG WITH BARED WIRES IS DANGEROUS IF ENGAGED IN A LIVE SOCKET OUTLET. When an alternative type of plug is used it should be fitted with a **5 AMP FUSE**, otherwise the circuit should be protected by a **5 AMP FUSE** at the distribution board.

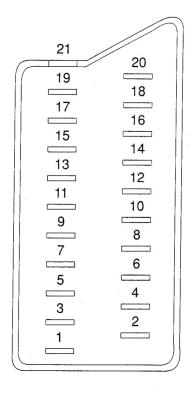


How to replace the fuse. Open the fuse compartment with the screwdriver blade and replace the fuse.

FUSE

21 pin connector (- 1)





Pin No.	1	2	4	Signal	Signal Level
1	0	0	-	Audio output B	Standard level: 0.5V rms Output impedance: Less than 1k ohms*
2	0	0	0	Audio input B (Right)	Standard level : 0.5V rms Output impedance : More than 10k ohms*
3	0	0	0	Audio output A (Left)	Standard level : 0.5V rms Output impedance : Less than 1k ohm*
4	0	0	0	Ground (Audio)	
5	0	0	0	Ground (Blue)	
6	0	0	0	Audio input A (Left)	Standard level : 0.5V rms Output impedance : Less than 10k ohm*
7	0	•	•	Blue input	0.7 ± 3dB, 75 ohms, positive
8	0	0	0	Function select (AV control)	High state (9.5 - 12V): Part mode Low state (0 - 2V): TV mode Input impedance: More10k ohms Input capacitance: Less than 2nF
9	0	0	0	Ground (Green)	
10	0	0	0	Open	
11	0	•	•	Green	
12	0	0	0	Open	
13	0	0	0	Ground (Red)	٠.
14	0	0	0	Ground (Blanking)	
15	0		-	Red input	0.7 ± 3dB, 75 ohms, positive
15	-	0	0	(S signal) croma input	0.7 ± 3dB, 75 ohms, positive
16	0	•	•	Blanking input (Ys signal)	High state (1 - 3V) Low state (0 - 0.4V) Input impedance : 75 ohms
17	0	0	0	Ground (Video output)	
18	0	0	0	Ground (Video input)	
19	0	0	0	Video output	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
20	0	-		Video input	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
	-[0		Video input Y (S signal)	1V ± 3dB, 75ohms, positive sync : 0.3V (-3 + 10dB)
21	0	0		Common ground (plug, sheild)	

O Connected • Not Connected (Open) * at 20Hz - 20kHz

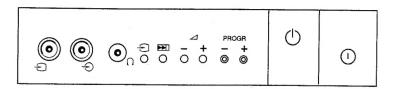


TABLE OF CONTENTS

Sec	ction	<u>Title</u>	Page	Sec	ction	<u>Title</u>	<u>Pag</u>
1.	Ge TV Te Me Op	NERAL etting Started	. 7 . 7 . 8	5.	5-1. 5-2.	GRAMS Block Diagram	26 26 31
2.	DISA 2-1. 2-2. 2-3.	ASSEMBLY Rear Cover Removal Service Position Picture Tube Removal	. 13		6-1.	LODED VIEWS Chassis CTRICAL PARTS LIST	
3.	SET 3-1. 3-2. 3-3.	Beam Landing	16				
4.	4-1. 4-2. 4-3.	CUIT ADJUSTMENTS Electrical Adjustments Test Mode 2: BE-4A Self Diagnostic Software	20				

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

SAFETY-RELATED COMPONENT WARNING!!
COMPONENTS IDENTIFIED BY SHADING AND MARK A ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND, IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARQUE A SUR LES VUES EXPLOSÉES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE PUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

Inserting the Batteries into the Remote Commander



Step 2

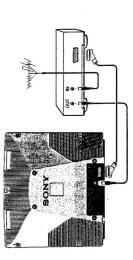
Connecting the Aerial

If you connect a VCR, skip to step 3.

Connect an external aerial to the socket $T \square M$.

Step 3

Connecting a VCR



programme number "0". For details, see "Presetting Channels Manually" on page 12. • It is recommended to tune in the VCR signal to

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

Presetting Channels Automatically

preferred see Menu option -Presetting Channels Manually. TV searches for all available channels. If manual tuning is

Plug into mains.

Press power switch ① 🗶 on TV set.

Press and hold [FI] I on TV set for 2 seconds. Auto tuning starts and screen shows.

Note • When Auto tuning stops the programme on

position 1 is seen.

PROGR 01 BG DK U IIIIIIIIIIIIII---

Getting Started

TV Operation

This section explains functions used whilst watching TV. Most operations are carried out using the Remote Commander.

To	Press
Switch on	① X on TV
Switch off temporarily	3 0
	TV is now in standby mode, & indicator W on
Switch on again	IV lights. ○ ♠, PROGR +/-♠ ☒ or any number button ♠
Switch off completely	① X on TV
	To save energy we recommend switching off completely when TV is not in use.
Select programmes	PROGR +/- @ M or number buttons @
· •	For double digit numbers press -/- 📵 then the number e.g. For 23, press -/ 📵 then 2 and 3.
Display the programme number	Œ © Press again to make programme number disappear.
Adjust the volume	₩-/- •
Mute the sound	④ ¥
	Press again to restore sound.
View video input	90
	Press again to return to TV programme.
View programmes in 16:9 mode	
	Press again to return to 4:3 mode.
	Note • 任語 () is to be used to optimise the viewing of 16:9 signals, which will be available in the future.

Teletext Operation (only for KV-21T1)

Viewing Teletext

Feletext is an information service broadcast by TV stations.

- Select the channel which carries the teletext service you wish to receive.
- 2 Press (B) to switch on teletext.
- Input three digits for the page number using the programme number buttons **0** or PROGR +/- **0 W**
- 4 Press to switch off teletext.

Note • Teletext errors may occur if the broadcasting signals are weak.

Using Other Teletext Functions

Superimposing teletext on the TV

Press (once in teletext mode or twice in TV mode to Press (B again to cancel superimposing. superimpose teletext on the TV screen.



TELETEXT



Revealing concealed information (eg: answers to a quiz)

prevents the information that is displayed from being updated.

Press (to cancel HOLD and allow update to continue.

Press (FOLD) to freeze the subpage. Freezing the page

Freezing a teletext subpage

Press again to conceal the information. Press ② ② to reveal information.

Using colour buttons to access pages

When the colour coded menu appears at the bottom of a page, press the colour button (red, green, blue or yellow) **###** to access the corresponding page. Note • A programme status message in a blue box may appear when you change programmes (depends on broadcasters).

 ∞

Use buttons on Remote Commander to control Menu screen.

MENU **®** Menu Screen on/off

Green @

scroll up Red 🖨 decrease

increase/confirm(OK) Yellow

Blue 0

scroll down 40

Adjusting the Picture

Press MENU @

Press green $\boldsymbol{\mathsf{G}}$ or blue $\boldsymbol{\mathsf{\Phi}}$ button to select the item you wish to change.

ı						
+		More	More	Brighter	Sharper	Greenish
- Effect		Less	ess	Darker	ofter	eddish
		_			-	
Item		Picture	Colour	Brightness	Sharpne	Hue
Symbol		•	•	Φ	0	N Z

8 ---

Note • Hue is available only when NTSC signal is input.

 $\boldsymbol{3}$ Press red $\boldsymbol{\Phi}$ or yellow $\boldsymbol{\Theta}$ button to change levels.

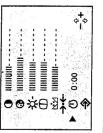
4 Press MENU **(1)** to return to normal TV screen.

Note • To reset to factory preset picture levels, press green **⑤** or blue **⑥** button to select →•◆ and press yellow (OK) **⑥** button.

Using the Sleep Timer

The TV may be set to switch to the standby mode automatically after a length of time chosen by you. You may set the time in 30 minutes steps up to 4 hours.

- 1 Press MENU @.
- **2** Press green Θ or blue Φ button to select Θ .



- Press red $\pmb{\Theta}$ or yellow $\pmb{\Theta}$ button to set time delay. 0.00 (OFF) 0.30 $\,$ 1.00 $\,$ 1.30 $....\,4.00$
- Press MENU 0 to return to normal TV screen. When watching TV, press 0 to display time remaining.

Presetting Channels Manually

Up to 60 programme positions are available for presetting channels.

- Press MENU .
- Press green **⑤** or blue **⑩** button to select ❖ and press yellow (OK) **⑩** button.
- 3 Select programme number using PROGR +/- ♥️ v or the number buttons O.

► PROGR 23

U INIMINITIE...
BG DK

Coo

←FF→

PROGR S6

- 4 Press green **@** or blue **①** button to select TV system (BG or DK) if necessary and press red **①** or yellow **①** button to change TV system.
- Press green **⑤** or blue **①** button to select tuning bar (IIIIII....) and press red **⑥** or yellow **⑥** button to start channel search. When a channel is found the tuning bar stops moving and you see the picture.
- **6** If you want to store, press green **G** or blue **D** button to select ♦ and press yellow (OK) **O** button. If you do not want to store, press red **D** or yellow **O** button to continue search.
- 7 Repeat steps 3 to 6 for all other channels.
- 8 Press MENU ♠ to return to normal TV screen.

Skipping Programme Positions

You can skip unused programme positions when selecting channels with the PROGR +/- ♥☑ buttons. You can still select them, however, using the number buttons ⑥.

- Press MENU
- 2 Press green **G** or blue **①** button to select ⇒ and press yellow **②** button.
- Select programme number you want to skip using PROGR +/- ♥ ▼ button or number buttons ●.



- 4 Press green **⑤** or blue **◑** button to select Coo and press yellow (OK) **⑥** button.
- 5 Press green **⑤** or blue **⑥** button to select ⋄ and press yellow (OK) **⑥** button to store.
- **6** Repeat steps 3 to 5 for other unused programme positions.
- 7 Press MENU **(a)** to return to normal TV screen.
- **Note** To restore a skipped programme number, refer to 'Presetting Channels Manually'.

Fine-Tuning Channels

You can fine tune a stored channel if necessary.

- Select the channel you wish to fine tune.
- Press MENU @
- Press green ${\bf G}$ or blue ${\bf \Phi}$ button to select $\hat{\Rightarrow}$ and press yellow (OK) ${\bf O}$ button.
- Press green \bullet or blue \bullet button to select \leftarrow F \rightarrow and use red \bullet or yellow \bullet button to adjust tuning. 4



Press green \bullet or blue \bullet button to select \diamondsuit and press yellow (OK) \bullet button to store.

10 -

Press MENU • to return to normal TV screen. ဖ

Programme Positions Exchanging

After tuning you may wish to rearrange the programme positions.

- 1 Press MENU @.
- **2** Press green \bullet or blue \bullet button to select \Rightarrow and press yellow (OK) \bullet button.
- Press green **G** or blue **D** button to select PROGR ^M and press yellow (OK) **O** button.



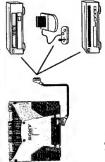
PROGR 01 PROGR 03

- $\boldsymbol{4}$ Press red $\boldsymbol{\oplus}$ or yellow $\boldsymbol{\Theta}$ button to select the first programme position.
- Press the blue **①** button.
- 6 Press the red (1) or yellow (10) button to select the second programme position.
- 7 Press blue **(1)** button to select ⁽¹⁾ and press yellow (OK) **(2)** button to exchange.
- Repeat steps 4 to 7 for other programme positions. œ
- Press MENU **1** to return to normal TV screen. 6

Optional Connections

Connectors Using the

rear of the set and two connectors (phono jacks : ① video, ① audio) ② on the front of the set. You can connect optional audio or video equipment to these connectors, such as a VCR, video games or a video disc player. Your TV has one 21-pin connector Z on the



1 Press • O S to view the video input signal.

ırmal	
O • to return to normal	
or \bigcirc	
Press 🕘 🕒 🖸	TV screen.
7	

Note • To avoid picture distortion, do not connect equipment to the 21-pin connector and the front connectors at the same time.

Headphones Connecting

Plug in the headphones to the 0 \blacksquare socket on the front of the TV set to mute the sound from the speaker.

Additional Information

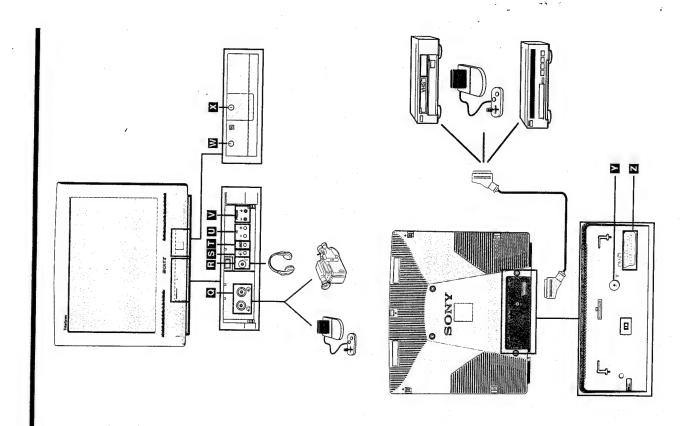
Troubleshooting

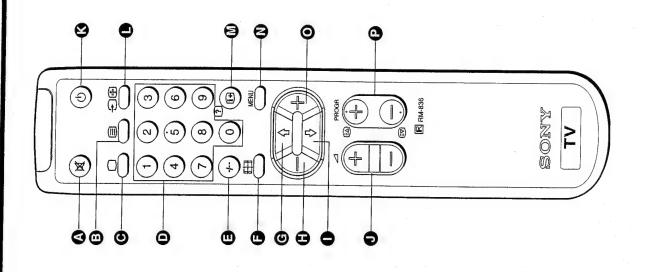
Here are some simple solutions to the problems which affect the picture and sound.

No picture, screen is dark, no sound	•	Plug the TV in.
	•	Press © X on the TV.
	•	Press () or the programme number
		O on the remote commander if Θ
		indicator W is on.
	•	Check the aerial connection.
	•	Check that the video source is on.
	•	Turn the TV off for 3 or 4 seconds and
		then turn it on again using O X .
Poor or no picture (screen is dark, sound is good)	•	Press MENU (() and adjust brightness picture and colour levels.
Good nichine no sound	•	Adjust the volume 1+/- 00.
	•	Disconnect any headphones.
	•	Press 歌 if 歌 is displayed on the
		screen.
	•	Press MENU (A) and select appropriate TV system.
No colour on colour programmes	•	Press MENU (1) and adjust colour
		balance.
	•	Press MENU () and reset to factory settings.
Distorted picture when you change programmes	•	Turn off the equipment connected to the
or select teletext		equipment is not in use.
Remote commander does not function	•	Replace the batteries.
Remote commander does not function	•	Replace the batteries.

NEVER open the casing yourself.

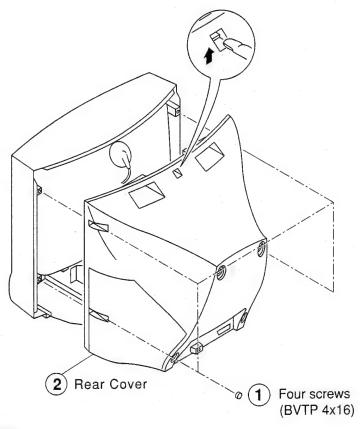




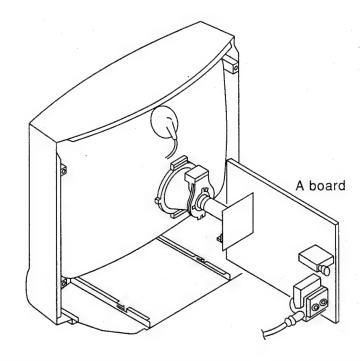


SECTION 2 DISASSEMBLY

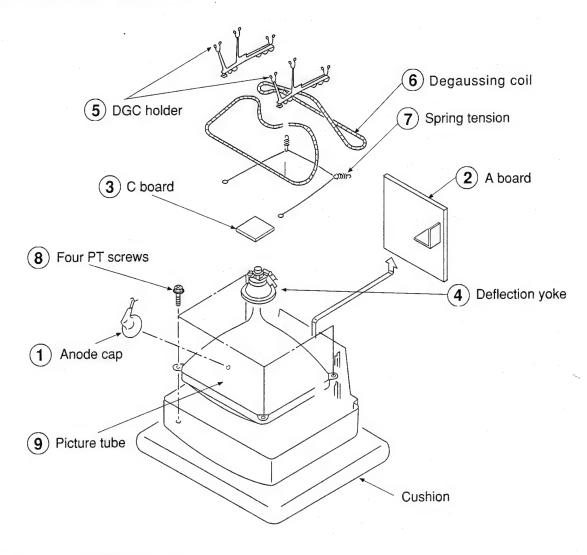
2-1. REAR COVER REMOVAL



2-2. SERVICE POSITION



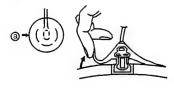
2-3. PICTURE TUBE REMOVAL



REMOVAL OF ANODE-CAP

Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT, after removing the anode.

REMOVING PROCEDURES.



- 1 Turn up one side of the rubber cap in the direction indicated by the arrow (a)
- - ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⑤



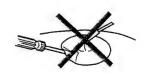
(3) When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow (©)

HOW TO HANDLE AN ANODE-CAP

- 1) Don't damage the surface of anode-cap with sharp shaped material!
- 2 Don't press the rubber hardly not to hurt inside of anode-caps! A metal fitting called as shatter-hook terminal is built into the rubber.
- 3 Don't turn the foot of rubber over hardly!

 The shatter-hook terminal will stick out or damage the rubber.





SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with the rated power supply voltage, unless otherwise noted.

The Contrast and Brightness controls should be set as follows unless otherwise noted:

OCONTRAST control 80%

(or Normal by commander)

☆ BRIGHTNESS control 50%

Perform the adjustments in the following order:

- 1. Beam Landing
- 2. Convergence
- Screen (G2), Drive, White Balance, Sub Colour and Sub Brightness.
- 4. Focus

Note: Test Equipment Required.

- Colour bar/Pattern Generator
- 2. Degausser
- 3. DC Power Supply
- 4. Digital multimeter
- 5. Oscilloscope

Preparation:

- In order to reduce the influence of external magnetic forces on the picture tube, face the TV set in an easterly or westerly direction.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

3-1. BEAM LANDING

Demagnetize with a degausser.

- Input an all white raster signal from the pattern generator.
 CONTRAST BRIGHTNESS normal
- 2. Switch the raster signal of the pattern generator to Red.
- 3. Move the deflection yoke backward, and adjust with the purity control so that Red is at the centre and the Blue and Green are evenly spaced at the sides. see (Fig. 3-1 3-3)
- 4. Move the deflection yoke forward, and adjust so that the entire screen becomes Red. (Fig. 3-1)
- 5. Switch the raster signal to Blue and then Green to confirm the condition.
- 6. When the position of the deflection yoke has been determined, tighten it with the deflection yoke mounting
- When the landing at the corners is not correct, adjust by using disk magnets. (Fig. 3-4)

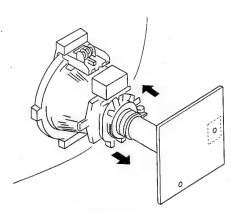


Fig. 3-1

Fig. 3-2

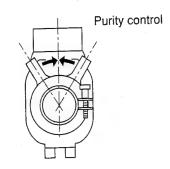


Fig. 3-3

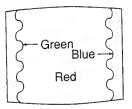
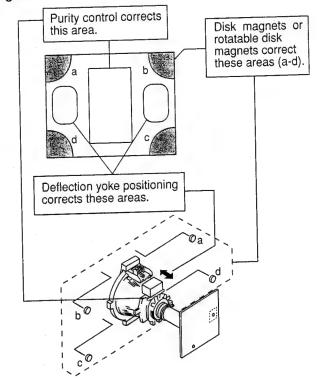


Fig. 3-4

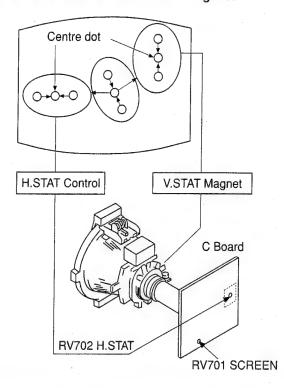


3-2. CONVERGENCE

Preparation:

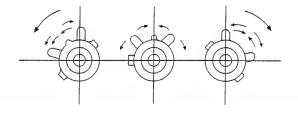
- Before starting, perform FOCUS, H.SIZE, and V.SIZE adjustments.
- Set the BRIGHTNESS control to minimum.
- Input a dot pattern from the pattern generator.

(1) Horizontal and Vertical Static Convergence

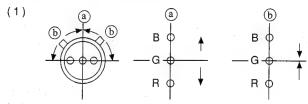


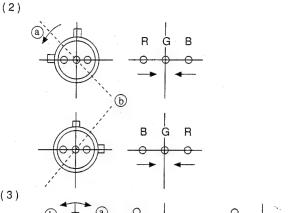
- 1. Adjust the H.STAT control to converge the Red, Green and Blue dots at the centre of the screen. (Horizontal movement)
- 2. Adjust the V.STAT magnet to converge the Red, Green and Blue dots at the centre of the screen. (Vertical movement)
- If the horizontal dots cannot coincide with variable range of the H.STAT convergence, adjust together with the V.STAT convergence while tracking.

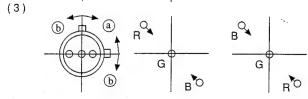
(Adjust the convergence by tilting the V.STAT convergence or by opening or closing the V.STAT convergence.)



3. When the V.STAT magnet is moved in the direction of the a and b arrows, the Red, Green and Blue dots move as shown below.



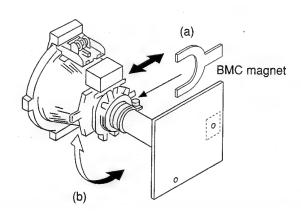




If the Red and Blue dots do not converge with the Green dots, perform the following steps.

- 1. Move the BMC magnet (a) to correct for insufficient H.static convergence.
- 2. Rotate the BMC magnet (b) to correct for insufficient V.static convergence.

In either case, repeat the Beam Landing Adjustment.

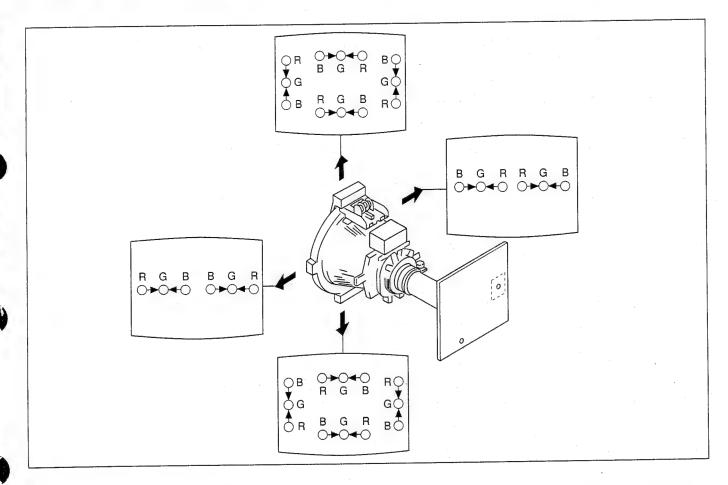


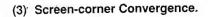
(2) Dynamic Convergence Adjustment

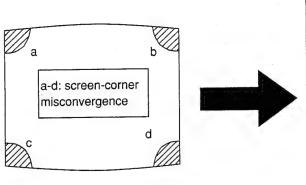
Preparation:

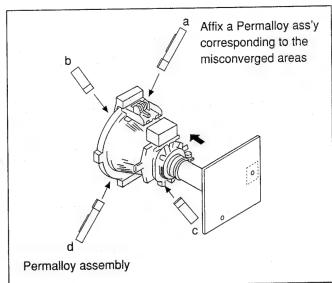
- Before starting, perform the Horizontal and Vertical static convergence adjustment.
- 1. Slightly loosen the deflection yoke screw.
- 2. Remove the deflection yoke spacers.

- 3. Move the deflection yoke for best convergence as shown below.
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.

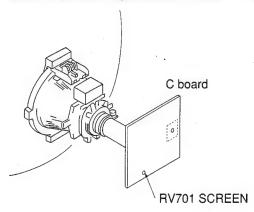








3-3. SCREEN (G2), DRIVE, WHITE BALANCE, SUB COLOUR and SUB BRIGHTNESS.

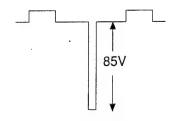


Screen (G2) setting

- 1. Input a 0 IRE (Black Level) signal from the pattern generator.
- 2. Enter into the Service Mode "Test" "Test" and 38.
- 3. Adjust RV701 until the Down arrow is displayed.
- 4. Adjust RV701 until the Down arrow just disappears.
- 5. Press the TV Button on the Remote Commander to store the data.

Drive Level

- 1. Input a Video signal containing a small area of 100% white on a black background.
- 2. Connect an oscilloscope to Pin (10) of J701 (R OUT) on the C Board.
- 3. Set the Picture to maximum using "Test" Test" and 01.
- 4. Enter into the Service mode (Adjust Menu).
- 5. Using the Blue and Green buttons select "RED HWB".
- Using the Red and Yellow buttons on the Remote Commander adjust until the oscilloscope waveform has an amplitude of 85V.

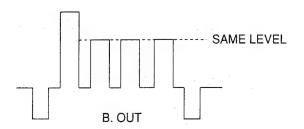


White Balance Adjustment

- 1. Input an all white pattern from the pattern generator.
- 2. Adjust the Colour and Brightness controls to the standard level.
- 3. Enter into the Service Mode.
- 4. Adjust the Green HWB and Blue HWB so that the White Balance becomes optimum.

Sub Colour Adjustment

- 1. Input a PAL colour bar pattern from the pattern generator.
- 2. Connect an oscilloscope to Pin (8) of J701 (B OUT) on the C Board.
- 3. Enter into the Service Mode "Test" Test and 22.
- 4. Using the Red and Yellow buttons on the Remote Commander adjust until the oscilloscope waveform becomes as follows:



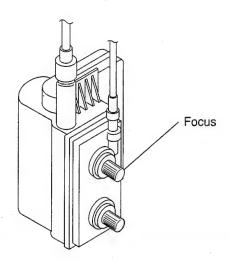
Note: If the TV is able to receive PAL and SECAM transmissions, repeat the above procedure using a Secam colour bar signal.

Sub Brightness Adjustment

- 1. Input a Philips pattern from the pattern generator.
- 2. Enter into the Service Mode "Test" "Test" and 23.
- 3. Using the Red and Yellow buttons on the Remote Commander adjust until the 0 IRE of the grey scale and the cut off are only slightly visible on the screen.

3-4. FOCUS

- 1. Receive a television broadcast signal.
- 2. Normalize the picture setting.
- Adjust the focus control on the flyback transformer for the best focus at the centre of the screen.
 Bring only the centre area of the screen into focus, the magenta-ring appears on the screen. In this case, adjust the focus to optimize the screen uniformly.



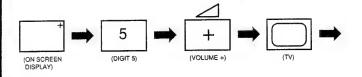
SECTION 4 CIRCUIT ADJUSTMENTS

4-1. ELECTRICAL ADJUSTMENTS

Service adjustment to this model can be performed with the supplied Remote Control Commander RM-836.

HOW TO ENTER INTO SERVICE MODE

- 1. Turn on the main power of the set and enter into stand-by mode.
- 2. Press the following sequence of buttons on the Remote Control Commander.



"TT--" will appear in the top right corner of the screen Other status information will also be displayed.

3. Press the MENU button on the Remote Commander to obtain the menu on the screen.

	Adjust.				
>	16:9 ON				
	System				
	Text				
	AGC	33	00-63		
	PLL	32	00-63		
,					
	V1 .00-01		SONY	BE-4A	

Software version

- 4. Press the Blue (Next) or Green (previous) buttons to select the adjustment item from the table.
- 5. Press the Yellow (+) or Red (-) buttons to change the data as required.
- Turn off the power to quit the service mode when adjustments are completed.

Range of adjustments available from the on screen menu system.

Adjustment	Set	Range
16:9 Off	Select	ON/OFF
		BG-L, BG-DK
System	Select	UK, Eire, BG
Text	Select	EAST/WEST
AGC	Adj.	00 - 63
PLL	Adj.	00 - 63
B&W Delay	Adj.	00 - 63
Ver Size	Adj.	00 - 63
Ver, Breath	00	00 - 63
Par, Ampl	00	00 - 63
Par, Tilt	32	00 - 63
V, Linear	Adj.	00 - 63
Corn, corr	00	00 - 63
V, Cen or EW	Adj.	00 - 63
V, Position	42	00 - 63
H, Centre	Adj.	00 - 63
Blue HWB	Adj.	00 - 63
Green HWB	Adj.	00 - 63
Red HWB	Adj.	00 - 63

4-2. TEST MODE 2:

TT -- Mode is available by pressing the Test button twice, O.S.D 'TT --' appears. The functions described below are available by pressing two digits. To release the 'TT --' mode, press 0 twice, press 'TEST', press 'TV' or switch the TV into Stand-by mode.

00	Switch 'TT' Mode off.
01	Set picture level to maximum.
02	Set picture level to minimum.
03	Set volume to 35%.
04	Set volume to 50%.
05	Set volume to 65%.
06	Set volume to 80%.
07	Ageing condition (picture max., brightness max.).
08	Shipping condition (Analog values are RESET to factory setting, Prog 1 is selected, TTmode switched off, Vol = 35%).
09	Dummy.
10	No function.
11	Dummy
12	Text Picture Level Offset (Enable/Disable)
13	Select Odd / Even field for Non-interlaced teletext.
14	Select Interlaced / Non-interlaced teletext display.
15	Read factory setting from ROM to NVM - Reads Volume, Brightness, Picture, Hue, Sharpness and Colour values from ROM to the actual used values (Last Power Memory).
16	No function
17	Enable / Disable Sharpness Operation.
18	Enable / Disable Teletext Operation.
19	Enable / Disable NTSC Operation.
20	No function.
21	Sub Picture.
22	Sub Colour (Pal / Secam Different Stores)
23	Sub Brightness.
24	Destination System BG/L.

25	Destination Systems BG/L.
26	Destination Systems I.
27	Destination System I/I'.
28	Destination BG only.
29	Dummy.
30	No function.
31-32	Dummy.
33	Auto AGC Adjust.
34	Auto PLL Adjust.
35-37	Dummy.
38	Enter G2 adjustment mode.
39	Dummy.
40	No function.
41	Re-initialise NVM.
42	Dummy.
43	Re-initialise Geometry settings.
44-47	Dummy
48	Set NVM testbyte to 44h in NVM.
49	Erase NVM testbyte
50	No function.

Note: For Test Modes 41 - 50, it is necessary to ensure that the TV is set to Prog 59.

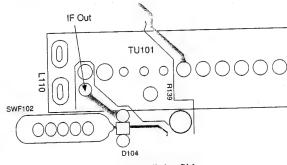
IF ADJUSTMENT (AUTOMATIC)

- Input a 38.9 MHz 100dB

 μ CW signal at the IF Out injection point.
- 2. Enter into service mode and press 34.
- 3. Connect a digital voltmeter to IC101 pin 23.
- Check AFT 2.5V ±0.3V dc.
- 5. Press '00' on the Remote Commander.

SYSTEM L ADJUSTMENT (French Models)

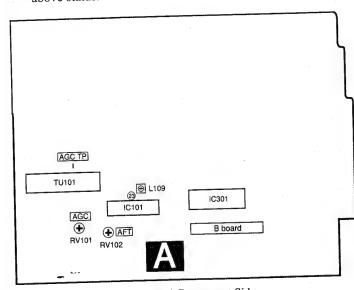
- Input a 33.9MHz 100dBμ CW signal at the IF Out injection point.
- 2. From the On Screen Menu set System to L band 1.
- 3. Connect a digital voltmeter to IC101 pin 23.
- 4. Adjust RV102 AFT for 2.5V ±0.3V dc.



- A Board Print Side -

AGC ADJUSTMENT

- Receive an off-air signal.
- 2. Enter into the Service adjust menu and select AGC.
- Adjust the data using the Red and Yellow buttons on the Remote Commander so that there is no snow or cross - modulation visible on the screen.
- 4. Change the receiving off-air channel, and confirm the above status.



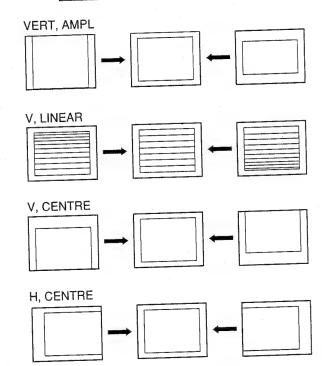
- A Board Component Side -

DEFLECTION SYSTEM ADJUSTMENT

- Enter into the service mode.
- 2. Using the Blue or Green buttons select the Adjust item.
- 3. Press the Yellow button to enter the adjustment submenu.
- 4. Select and adjust each item in order to obtain the optimum image.

See Note on page 22

Adjustment	Set	Range
VERT, AMPL	Adj.	00 - 63
VER, BREATH	00	00 - 63
PAR, AMPL	00	00 - 63
PAR, TILT	32	00 - 63
V, LINEAR	Adj.	00 - 63
CORN, CORR	Adj.	00 - 63
V, CENTRE	Adj.	00 - 63
V, POSITION	42	00 - 63
H, CENTRE	Adj.	00 - 63



Fit the link as required to obtain the correct horizontal picture size.

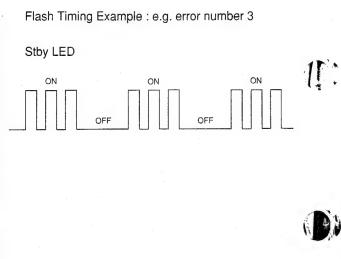
4-3. BE-4A SELF DIAGNOSTIC SOFTWARE

The identification of errors within the BE-4A chassis is triggered in 1 of 2 ways: - 1: Bus busy or 2: Device failure to respond to I²C. In the event of one of these situations arising the software will first try to release the Bus if busy (Failure to do so will report with a continuous flashing LED) and then communicate with each relevant device in turn to establish if a device is faulty. If a device is found to be faulty the relevant device number will be displayed through the LED by a Series of flashes which must be counted (See Table 1), Non fatal errors are reported with this method.

If a fatal error is found, the set will simply stay in whichever state it was when the error occurred, but if a non fatal error occurs the set will try to continue to operate.

Table 1

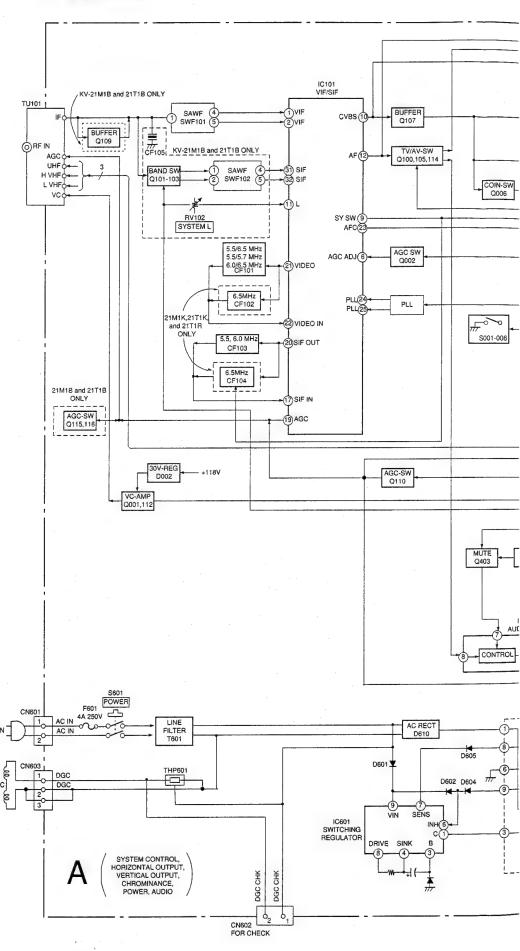
No of Flashes	Meaning		
2	IC301 not acknowledging I ² C transmission, NVM OK.		
3	IC301 FAULT (Not OK) - flags		
4	IC301 - No H Flyback		
5	IC301 - Stack Overflow.		
6	Overvoltage / Overcurrent Protection (Pin 52) high.		
7	IC002 not acknowledging I ² C transmission, IC301 OK.		
8	IC002 and IC301 - No I2C acknowledgment.		
9	General I ² C Error (SDA or SCL being held low)		
	(IC301, IC001, IC002, CN001)		

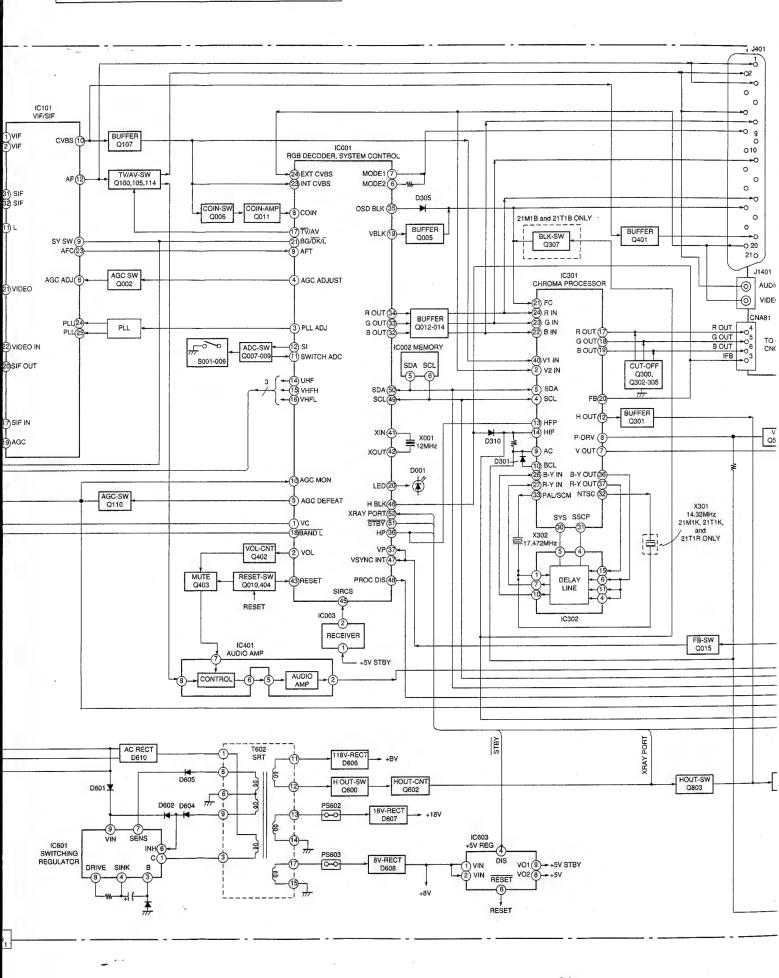


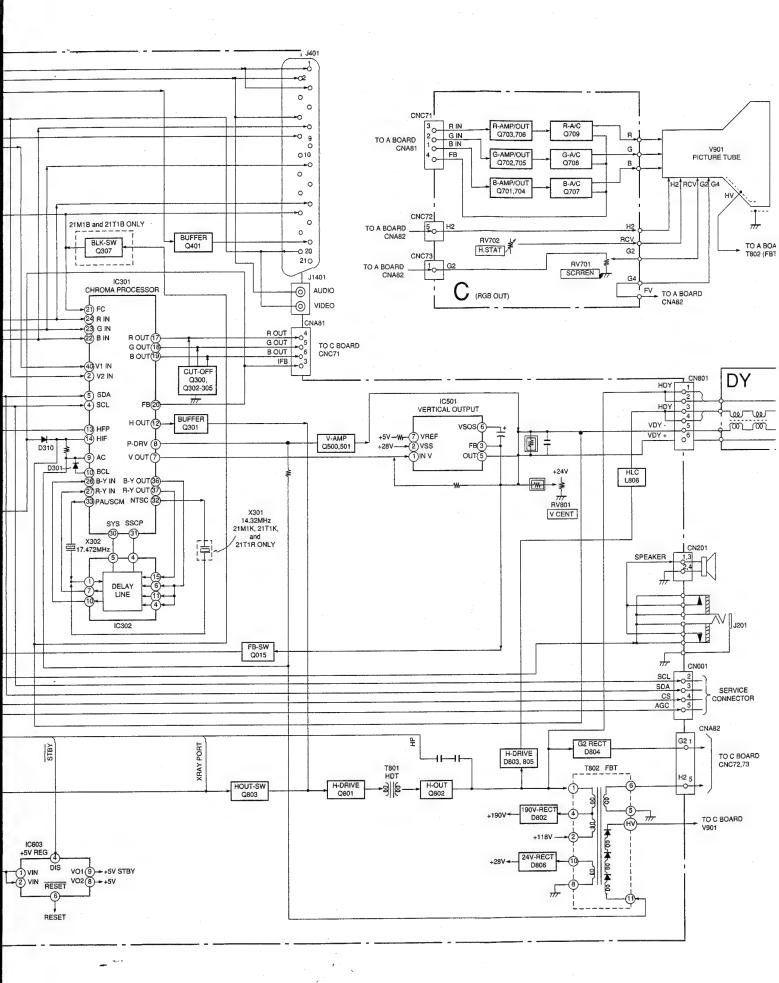
Note: Deflection System Adjustments should not be carried out whilst using an NTSC (60Hz) signal, or if the signal is unlocked.

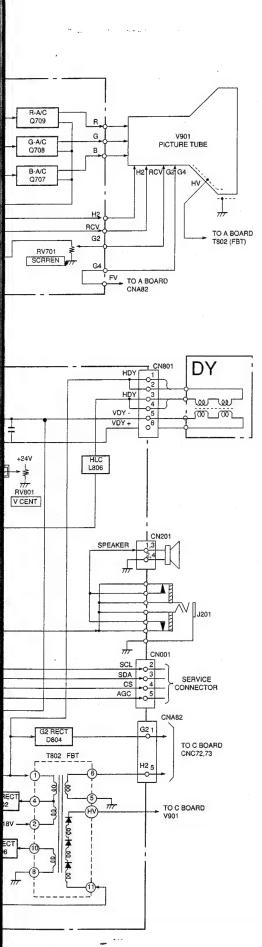
SECTION 5
DIAGRAMS

KV-21M1/T1









5-2. CIRCUIT

5-3. SCHEMA

Note:

- All capacitor 50WV or less tantalums.
 - All resistors: k = 1000 , N
- Indication of
- electrical pov

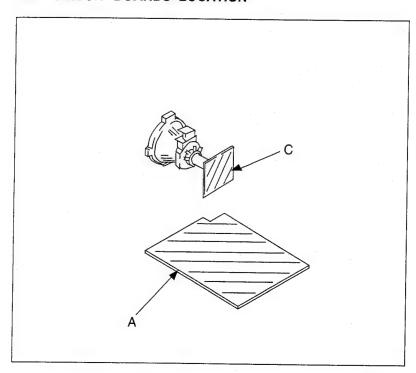
Pitch: 5 mm Rating electr

- W. : nc
- : int
- : pa
- All variable a
- B, unless oth : ea
- : ea
- : no

Note: The comp are c

Note: Les comp marque Ne les re numero s

CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.

k = 1000, M = 1000K

Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm

Rating electrical power 4 W

: nonflammable resistor. Δ : internal component.

: panel designation, or adjustment for repair.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : earth ground.
- : earth chassis.

: no mounted.

Note: The components identified by shading and marked A are critical for safety. Replace only with the part number specified.

Note: Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

Reference information

RESISTOR : RN METAL FILM

: RC SOLID : FPRD NONFLAMMABLE CARBON : FUSE NONFLAMMABLE FUSIBLE NONFLAMMABLE METAL OXIDE : RS : RB NONFLAMMABLE CEMENT :RW NONFLAMMABLE WIREWOUND ADJUSTABLE RESISTOR : X

COIL : LF-8L MICRO INDUCTOR

CAPACITOR :TA **TANTALUM** : PS STYROL

: PP **POLYPROPYLENE**

: PT **MYLAR**

: MPS METALIZED POLYESTER : MPP METALIZED POLYPROPYLENE

: ALB BIPOLAR

: ALT HIGH TEMPERATURE

: ALR HIGH RIPPLE

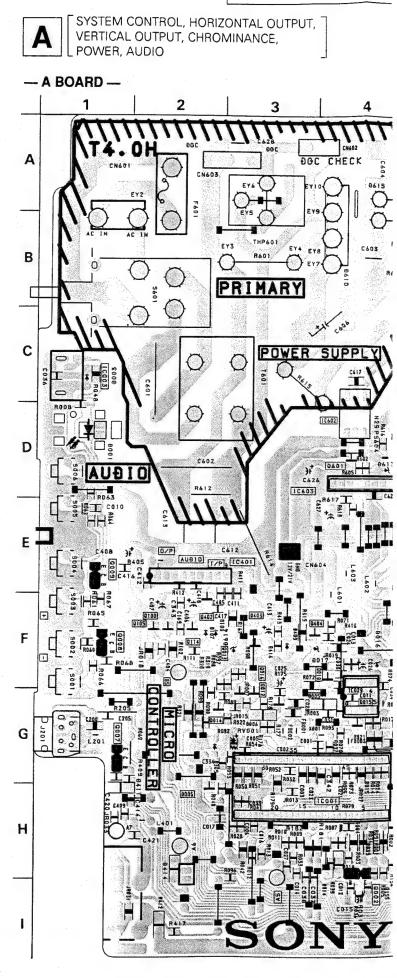
- Readings are taken with a colour-bar signal input.
- Readings are taken with $10M\Omega$ digital multimeter.
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform references.

: B+ bus.

: signal path. (RF)

A BOARD

` IC) 1 1 1 1	Q303	G-7	D402	H-5
IC001 IC002 IC003 IC101 IC301 IC302 IC401 IC501 IC603	G-4 G-10 G-5 H-7 E-3 D-9 A-5 D-3	Q304 Q305 Q306 Q307 Q308 Q401 Q402 Q403 Q404 Q600 Q602	F-7 G-7 G-8 F-8 H-7 H-10 F-2 F-3 F-4 D-6	D403 D404 D405 D406 D407 D408 D409 D410 D412 D414 D501	H-12 H-12 H-11 G-12 I-12 F-3 I-11 I-2 H-2 E-8
TRANS	STOR	Q801	E-6	D600	D-6
Q001 Q002 Q005 Q006 Q007	H-8 I-4 H-2 H-9 G-1	Q802 Q803 Q804 Q805	C-9 E-5 C-7 B-7	D601 D602 D603 D604 D605	A-6 B-6 A-5 B-6 B-6
Q008	F-1	DIO	DE	D606 D607	D-6 E-6
Q009 Q011 Q012 Q013 Q014 Q015 Q016 Q100 Q101 Q102 Q103 Q105 Q107 Q109 Q110	E-1 H-8 G-3 F-3 G-4 F-2 G-11 F-2 H-5 G-15 H-5 G-8	D001 D002 D003 D004 D005 D006 D014 D106 D102 D104 D105 D106 D107 D109	D-1 F-8 C-1 F-5 G-4 G-3 I-4 G-4 F-3 G-11 G-11 F-8 F-8 F-2 F-9	D608 D610 D611 D612 D613 D614 D801 D802 D803 D804 D805 D806 D807 D809	D-5 B-4 D-6 E-5 E-3 F-3 E-7 A-8 C-11 B-10 C-10 A-11 E-5 A-8
Q112 Q113	G-12 G-9	D301 D302	F-6 F-7	VARIA RESIS	
Q114 Q115 Q116 Q300 Q301 Q302	F-2 F-10 F-9 F-7 F-6 F-7	D305 D307 D308 D310 D315 D401	G-2 G-11 F-8 F-5 G-5 H-12	RV102 RV801	H-10 E-9



NOTE: KV-21M1/T1 KV-21M1/T1 The circ 600 Vp-r SYSTEM CONTROL, HORIZONTAL OUTPUT, inspectio VERTICAL OUTPUT, CHROMINANCE, POWER, AUDIO - A BOARD -R816 DOC CHECK 10801 В PRIMARY R610 I VERTICAL DEFLECTION SECONDARY D E

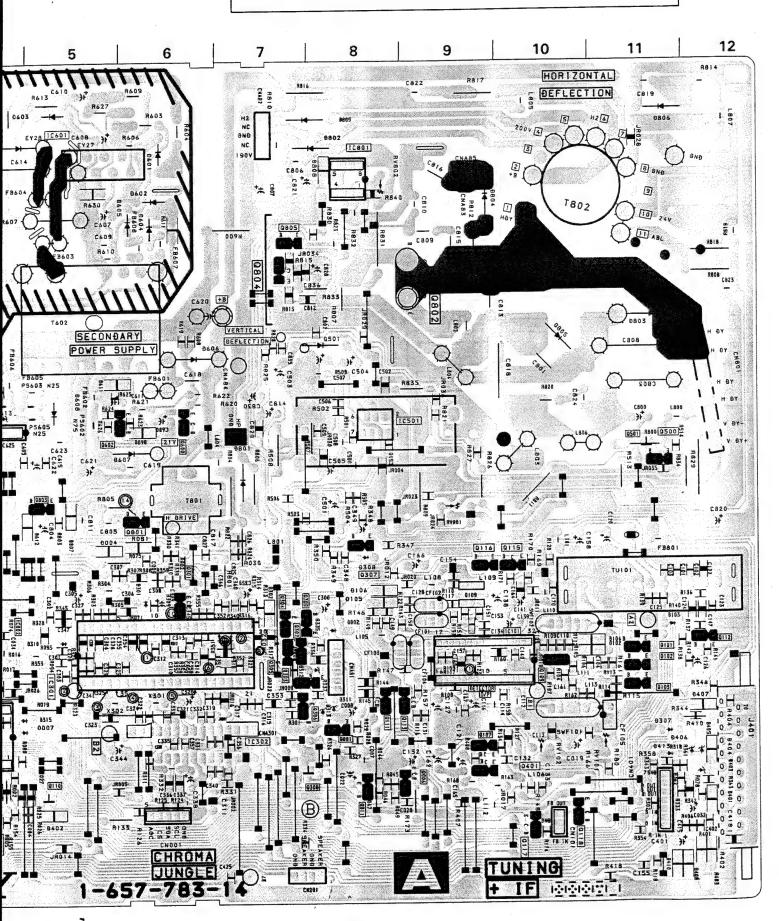
B 8402

JUNGLE



NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



A BOARD * MARK

12

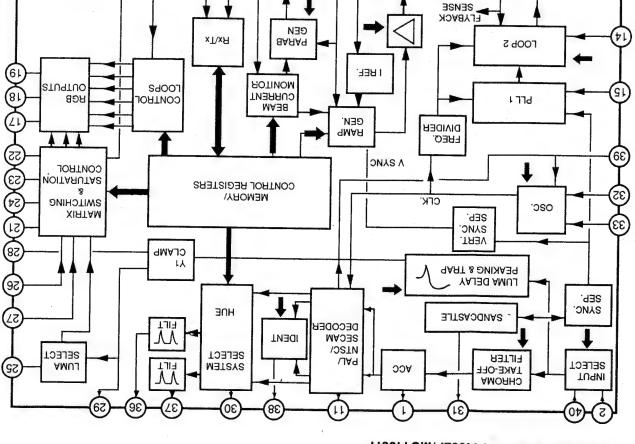
	01841A/21T1A	21M1B/21T1B	21M1D/21T1D	21M1E/21T1E	21M1K/21T1K	21M1L/21T1L	21T1R	21M1U/21T1U
-	21M1A/21T1A			0.47MF	0.47MF	0.47MF	_	0.47MF
016	0.47MF	0.47MF	0.47MF 0.47MF	0.47MF	0.47MF	0.47MF		0.47MF
017	0.47MF	0.47MF		0,4744			_	_
112		0.1MF		0.22MF	0.22MF	0.22MF	0.22MF	0.22MF
114	0.22MF	0.1MF	0.22MF	U.ZZIVII	_	_	_	_
2116		2.2 50V		470MF 10V	470MF 10V	470MF 10V	470MF 10V	470MF 10V
C120	1000MF 10V	1000MF 10V	1000MF 10V		0.001MF	_	0.001MF	_
0131	_	_		_	0.001MF	0.001MF	0.001MF	0.001MF
C151	_	_			15PF	15PF	15PF	15PF
C153	-	_		_	- 1313		_	_
C164	_	1MF					18PF	_
C322	_	_			18PF		_	
C348	_	0.01MF		_				
C349	_	22MF 50V				C O/C EMUZ	5.5/5.74MHz	6.0/6.5MHz
CF101	5.5/5.74MHz	5.5/6.5MHz	5.5/5.74MHz	5.5/5.74MHz	5.5/5.74MHz	6.0/6.5MHz	6.5M,Hz	
CF102	_	_		_	6.5MHz		5.5MHz	6.0MHz
CF103	5.5MHz	5.5MHz	5.5MHz	5.5MHz	5.5MHz	6.0MHz		0.000112
CF104		_		_	6.5MHz		6.5M,Hz	
CF105	_	5.5MHz	_	_				5.5MHz
	00	3P	4P(M1) ,3P(T1)	3P	4P	3P	4P	3P
CN201	3P	2P	2P	2P		_		
CN602	2P		25		1SS133T	_	1SS133T	_
D105	_				1SS133T		1\$\$133T	
D106					1SV214	1SV214	1SV214	1SV214
D109		_			-	_		_
D307	_	1SS133T	_				_	_
D308	_	1SS133T			t			
IC001				Refer to "A board	* mark-2" table	TDA9806	TDA9806	TDA9806
IC101	TDA9806	TDA9812	TDA9806	TDA9806	TDA9806	MC44007P	MC44002P	MC44007P
IC301	MC44007P	MC44002P	MC44002P	MC44007P	MC44002P	WC44007F	-	-
JR011	-	0 : CHIP	-			-	4.7μΗ	8.2µH
L108	8.2µH	8.2µH	8.2µH	8.2µH	4.7μΗ	8.2µH	AIR-CORE COIL	AIR-CORE COIL
L802	CHOKE COIL	CHOKE COIL	CHOKE COIL	CHOKE COIL	AIR-CORE COIL	AIR-CORE COIL		-
Q111	_	_	-	-	DTC144ES	-	DTC144ES	
Q113		_	-	-	DTC144ES		DTC144ES	
Q307		2SA933AS	-		-		-	
Q308		DTC144EK	DTC144EK	-	DTC144EK		DTC144EK	
	47K	33K	33K	47K	33K	47K	33K	47K
R006	150	150	150	150	100	150	100	150
R122		180	180	180	180	150	180	150
R134	180	0	0	0	0	0	2.2K	0
R143	0	-	 	_	2.2K	_	2.2K	_
R144			_		2.2K	-	2.2K	
R145	-	-			560	-	560	-
R147	-				2.2K	_	2.2K	
R149			-		100K	100K	100K	100K
R151	-	-			100K	100K	100K	100K
R153	_		-		-	-	-	-
R157		1K		- 200	390	390	390	390
R158	390	180	390	390		0 : CHIP	0 : CHIP	0 : CHIP
R161	0 : CHIP	-	0 : CHIP	0 : CHIP	0 : CHIP	0; Chir		_
R180	-	1K					82K	-
R326	-	82K	82K	_	82K		100K	
R327	-	100K	100K	-	100K	_	- 100K	-
H32/		470	-	-				
R347		10K	-	-	_		-	+
R347					-			-
R347 R348	-	220K	-				_	
R347 R348 R349			-	-	-			
R347 R348 R349 R350	-	220K 220	-		8.2M		8.2M	
R347 R348 R349 R350 R351		220K 220 8.2M					8.2M 75	68
R347 R348 R349 R350 R351 R410	- - - 75	220K 220 8.2M 75	8.2M		8.2M	_	8.2M 75	68
R347 R348 R349 R350 R351 R410 RV102	- - - 75	220K 220 8.2M 75 22K	8.2M 75	- - 75	8.2M 75	- 68	8.2M 75	68 - OFWJ1952M
R347 R348 R349 R350 R351 R410	- - - 75	220K 220 8.2M 75	8.2M 75	- - 75	8.2M 75	68	8.2M 75	68

A BOARD * MARK-2 (IC001)

ĺ	KV-21M1A/21M1B/21M1D/21M1E/21M1K/21M1L/21M1U	SAA5288ZP/014
ŀ	KV-21T1A/21T1B/21T1D/21T1E/21T1K/21T1L/21T1R/21T1U	SAA5290ZP/014

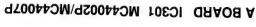
WAVEFORMS A BOARD

1	2	3	4 PAL	4 SECAM/NTSC
		[hy]hy]]		
2.0 Vp-p (H)	1.0 Vp-p (H)	1.0 Vp-p (H)	1.0 Vp-p (H)	1.2 Vp-p (H)
5 PAL	5 SECAM	5 NTSC	6 PAL	6 SECAM
[hy]hy]	[[hy]hy]]	[[hy]hy]]		
1.0 Vp-p (H)	0.5 Vp-p (H)	1.1 Vp-p (H)	1.4 Vp-p (H)	0.7 Vp-p (H)
6 NTSC	7	8	9	10
	Ilmolmolm		MINTIN	
1.5 Vp-p (H)	1.0 Vp-p (H)	1.4 Vp-p (H)	1.5 Vp-p (H)	0.8 Vp-p (H)
11)	12	13	14	15
1.8 Vp-p (V)	55 Vp-p (V)	7.3 Vp-p (V)	220 Vp-p (H)	10 Vp-p (H)
16	17	18		
	12hh			
1.4KVp-p (H)	51 Vp-p (H)	24 Vp-p (H)		



9 **)**(E

(9I)





TO C BOARD

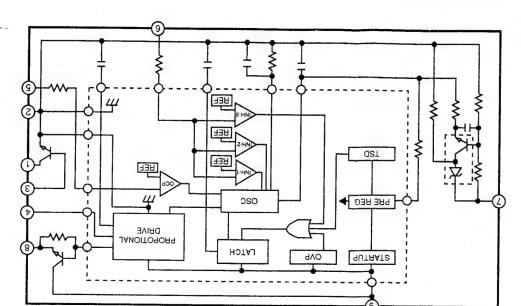
E OUT B OUT B OUT

00109 3 01	_
	Σ8AN3 q1
BBUT BE	v HUT314 Ö
TO C BOARD CNC72	180A N\C 2ND N\C HS
	28AP

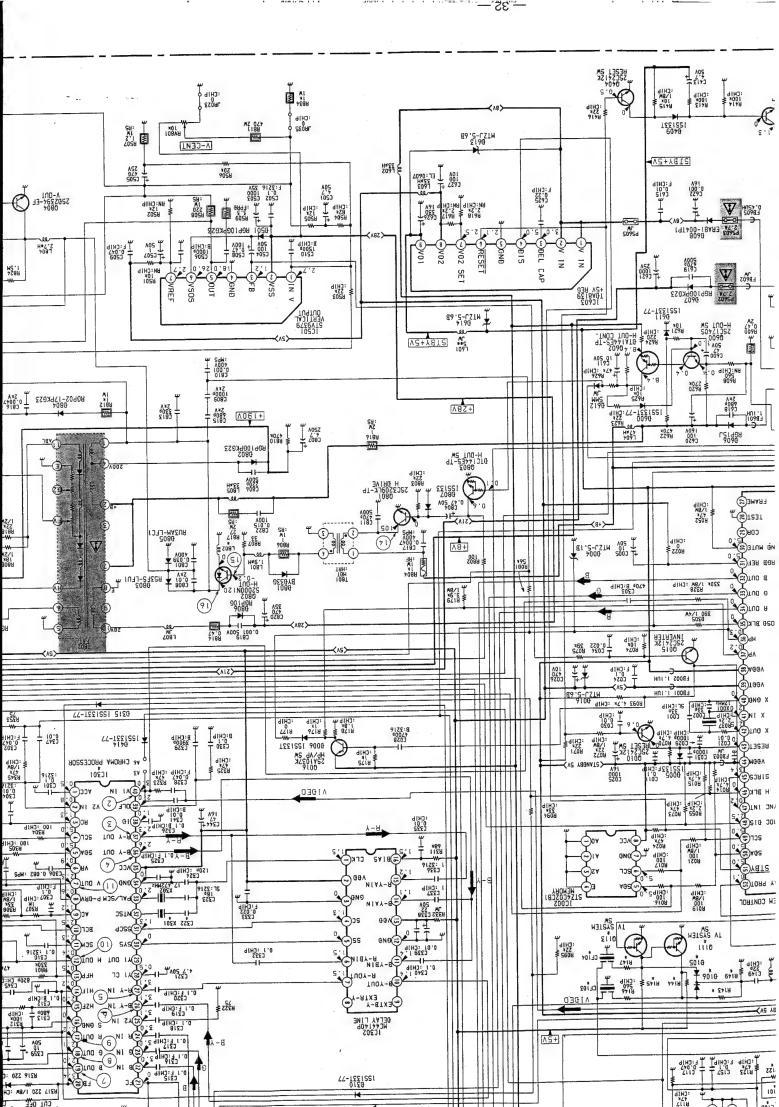
	G	avua	3 /
CNC73) L		7 :
		-	58AN 91

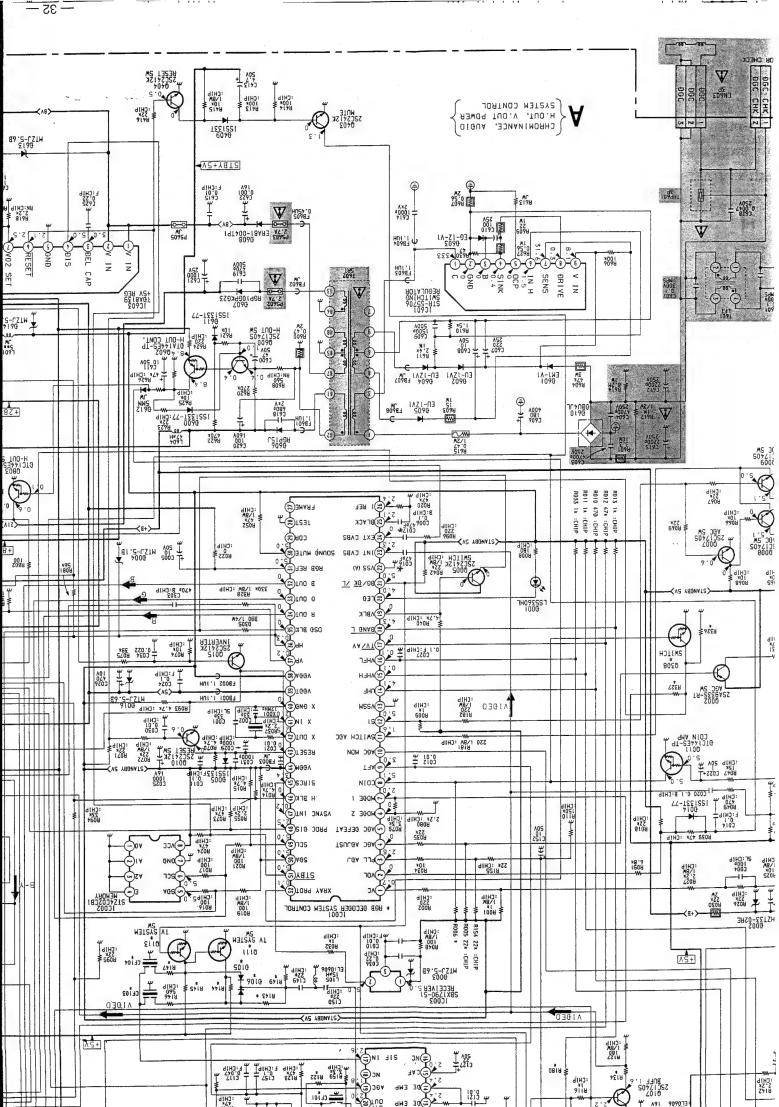
0		
907328T2	10901	GRAO8 A

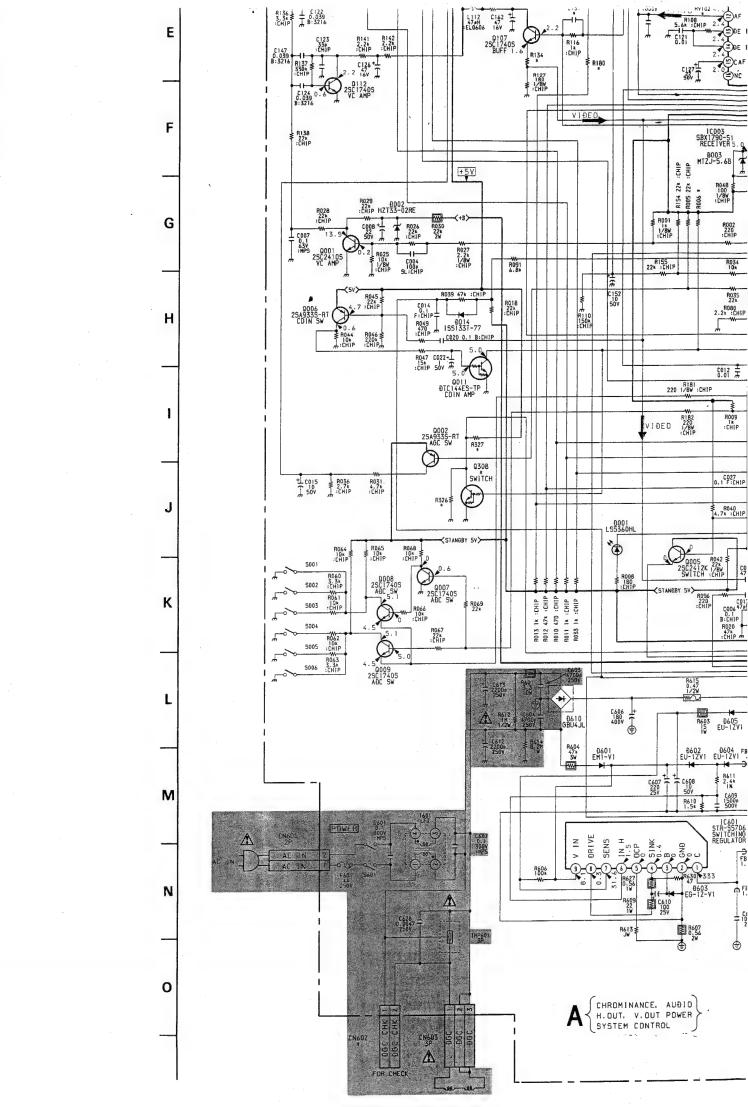
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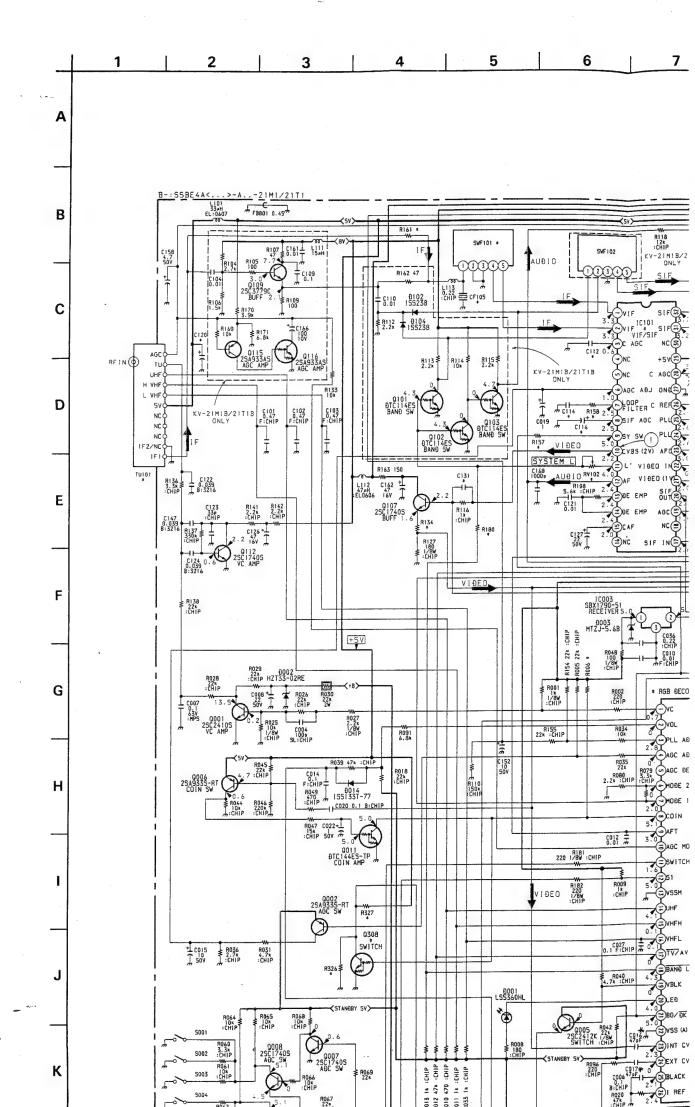


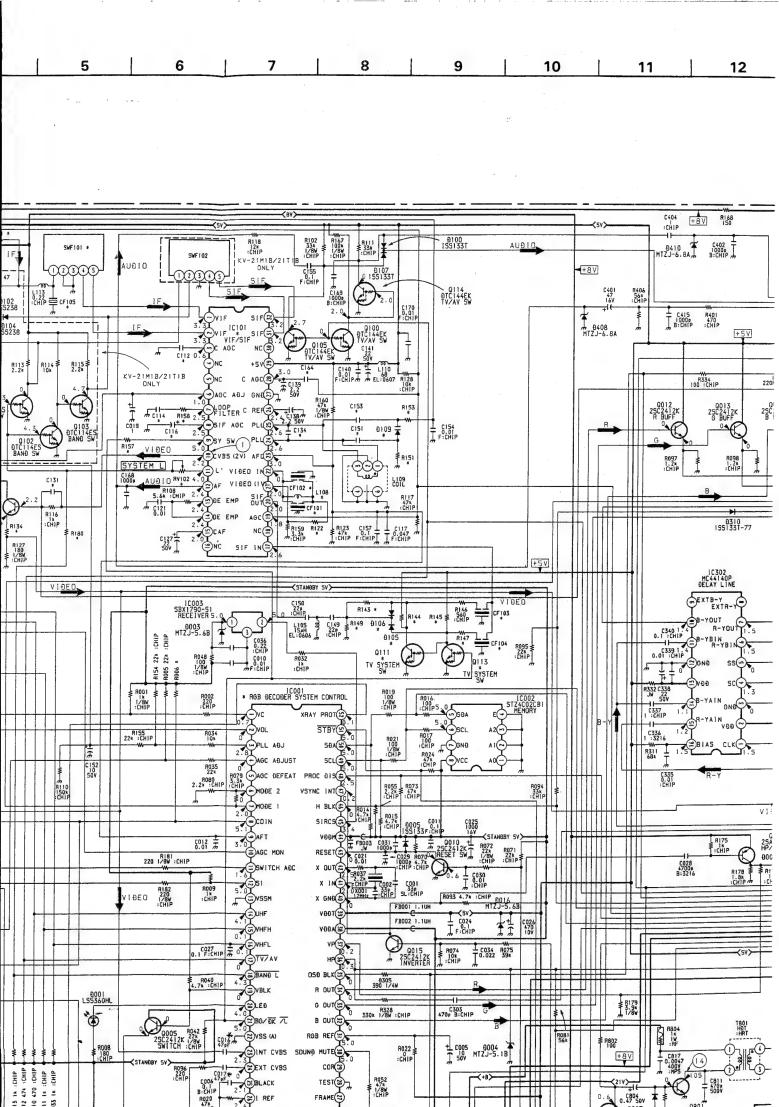


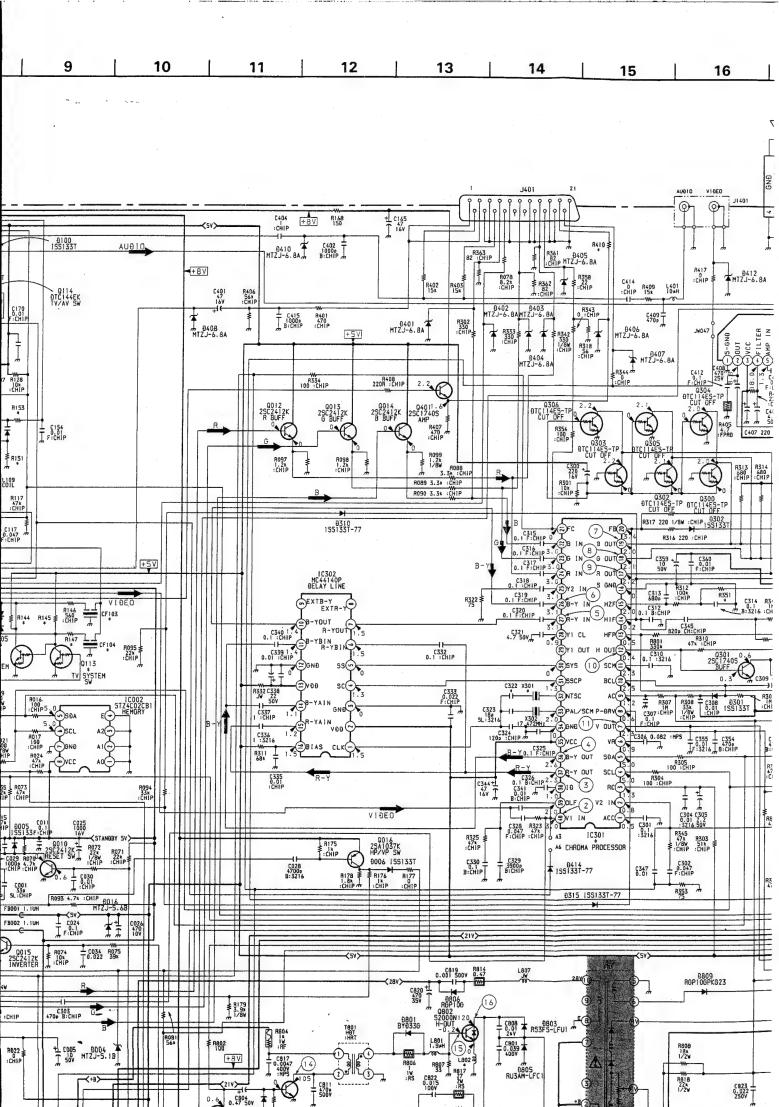


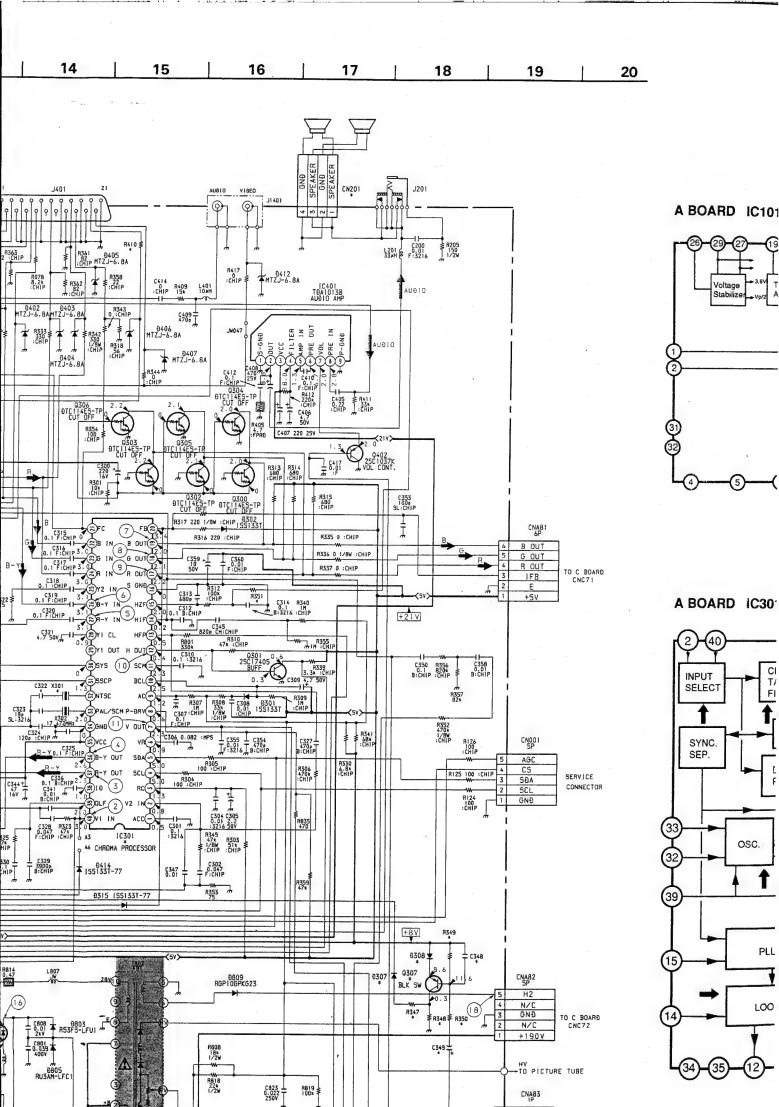




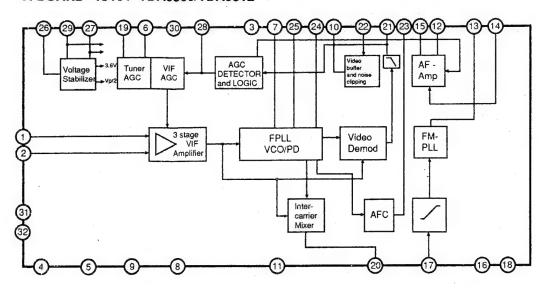






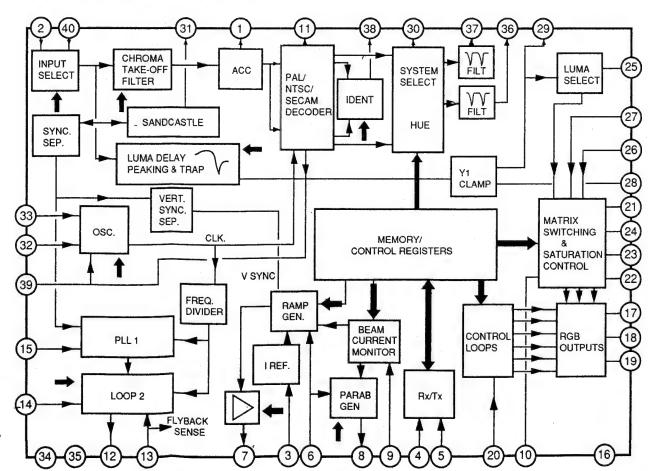


A BOARD IC101 TDA9806/TDA9812



CNC71

A BOARD IC301 MC44002P/MC44007P



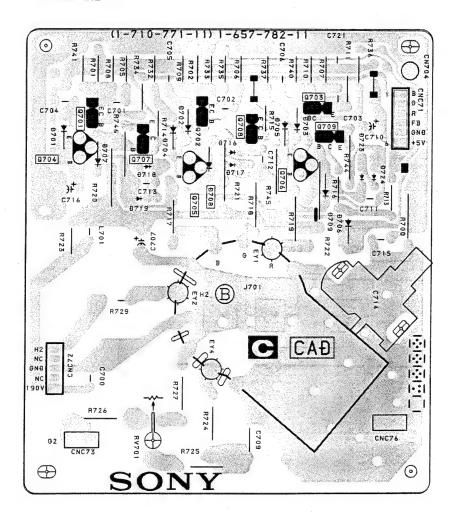
SERVICE CONNECTOR

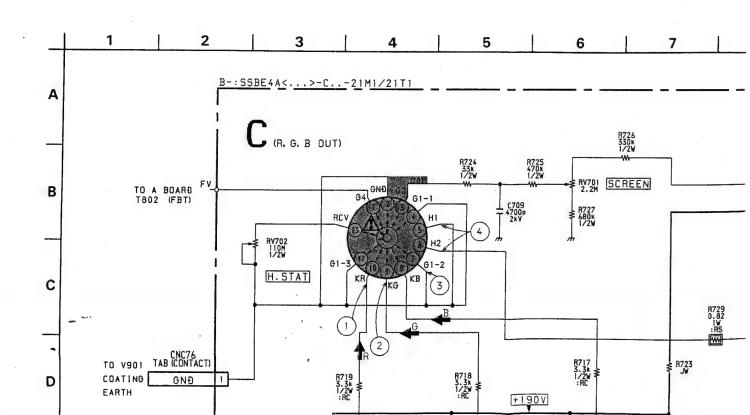
O C BOARD CNC72

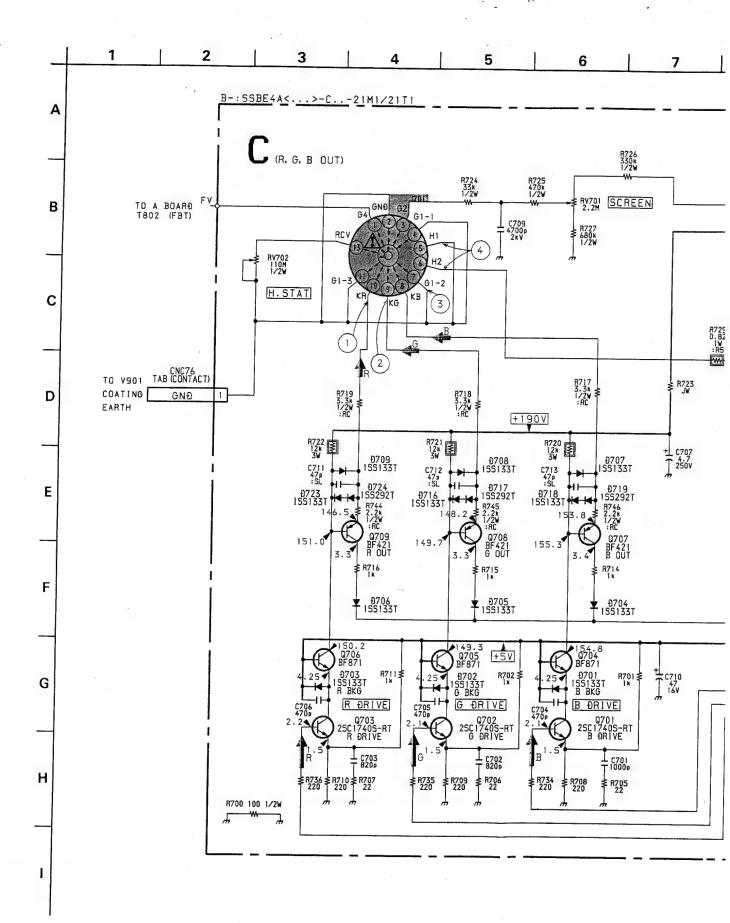
TUBE

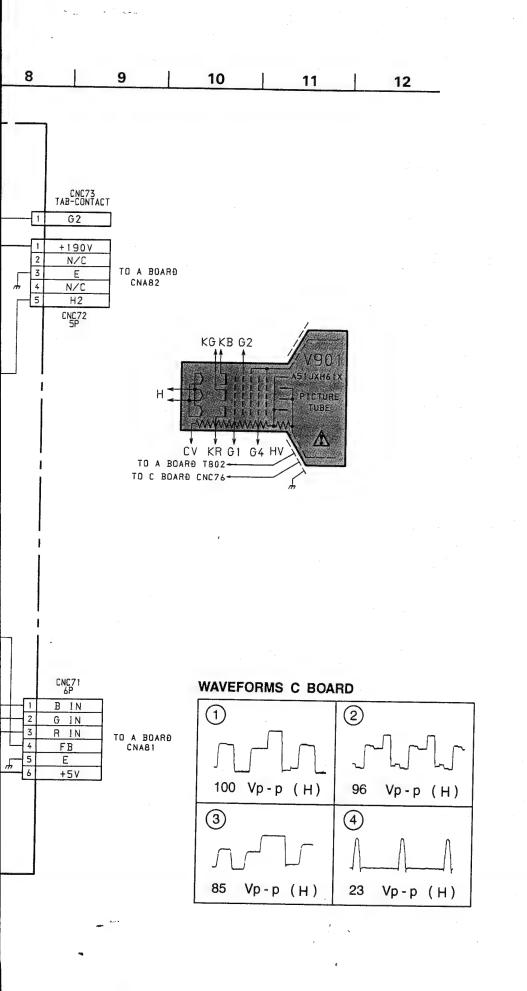
C [R.G.B OUT]

— C BOARD —









TDA810

TDA980

TDA98

00000

BF421

2SA109

BF871-1

DTA144I DTC114 DTC144

DTC144I

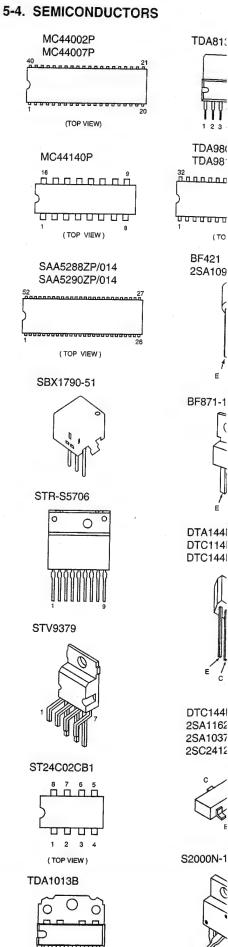
2SA1162

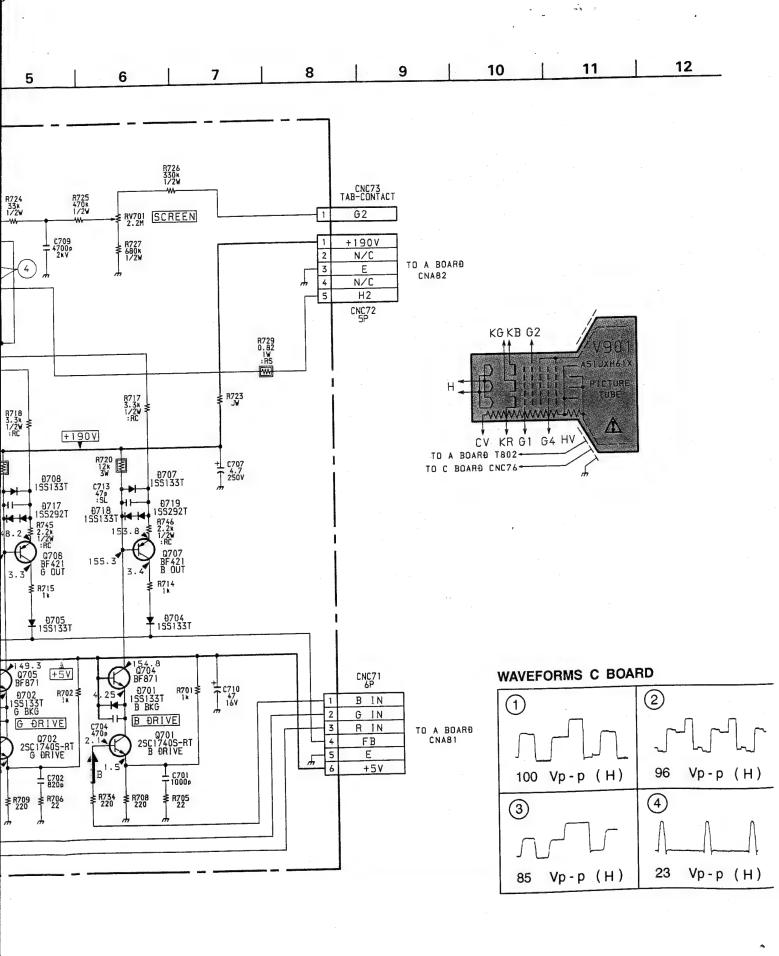
2SA1037 2SC2412

S2000N-1

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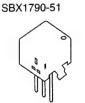
5-4. SEMICONDUCTORS



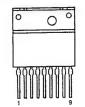
MC44140P

(TOP VIEW)

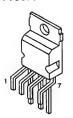




STR-S5706



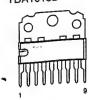
STV9379



ST24C02CB1



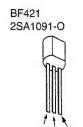
TDA1013B



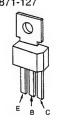
TDA8139



TDA9806 TDA9812 (TOP VIEW)



BF871-127



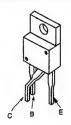
DTA144ES DTC114ES DTC144ES



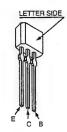
DTC144EK 2SA1162-G 2SA1037K 2SC2412K-QR



S2000N-16E305A



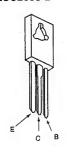
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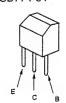
2SC1740S 2SC2785-HFE



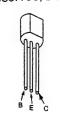
2SC2688-L



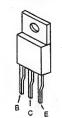
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2SC3779C, D-AA



2SD1408-Y 2SD1761-E 2SD2394-EF

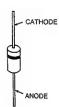


HZT33-02RE UPC574J

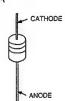
The tribute of the strain of the strain of the second of the second of the second



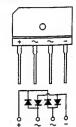
BYD33G EU-1Z EG-1Z-V1 RGP02-17EL-6433 EGP20G RGP02-17PKG23 EL1Z RGP10GPKG23 EM1-V1 RGP15J-6040FG23 ERC06-15S RU3AM ERD28-06S 1SS168 ERD28-08S 1SS238

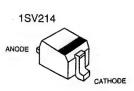


ERA81-004 RD5.1ESB2 ERA83-006 RD5.6ESB2 MTZJ-5.1B RD6.8ESB2 MTZJ-5.6B 1SS133T-77 MTZJ-6.8A



GBU4JL-6088







REF

NO

SECTION 6 EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they
 are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

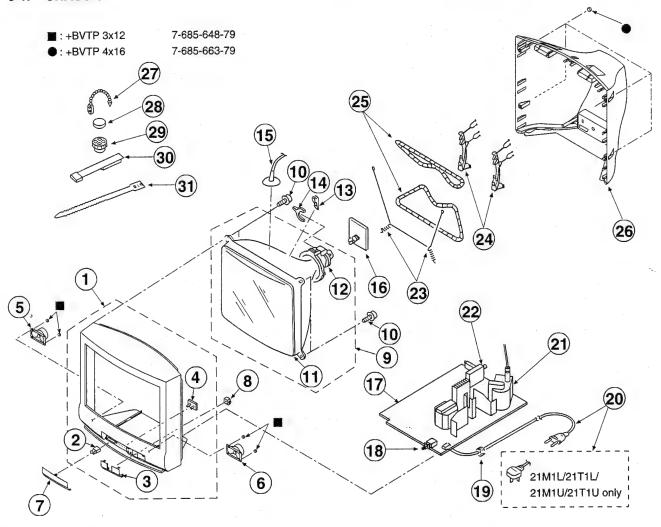
The components identified by shading and marked Λ are critical for safety.

Replace only with the part number specified.

Les composants identifies par une trame et une marque \hat{L} sont critiques pour la securite. Ne les remplacer que par une piece

portant le numero specifie.

6-1. CHASSIS



REF NO	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMARK
1	X-4200-265-1	BEZNET ASSY	2-4	8	4-203-433-01	BUTTON, POWER	
2	4-047-464-01	CATCHER, PUSH		RESERVED AND			445.17
3	4-203-432-01	WINDOW		10	4-036-190-01	SCREW (5), TAPPING	ecros of a respective of a residence
4	*4-203-431-01	GUIDE, LIGHT				The standard and the second second second	17 1.6 79.6: (58.6 %)
5	1-504-899-11	SPEAKER (9X5CM)	(KV-21M1K/21T1K/21T1R)	19_{100}	国。2012年19月2日	न्यायकार्यकार्यकार्यकार्यः	13.71:1,9
5	1-503-258-21	SPEAKER		13	3-704-495-01	SPACER, DY	
-		(KV-21M1A/21T1A/2	21M1B/21T1B/21M1D/21T1D/	14	1-452-277-00	MAGNET, BMC	max and a fact of the street free
		21M1E/21T1E/2	21M1L/21T1L/21M1U/21T1U)		1 327 (2)((6)	on a to see a second that the	
	1-504-899-11	SPEAKER (9X5CM)	(KV-21M1K/21T1K/21T1R)	16	*A-1638-074-A	C BOARD, COMPLETE	
7	4-203-430-01	DOOR (BARE)	(KV-21M1A/21M1D/21M1E/				
			21M1K/21M1L/21M1U)				
	4-203-435-21	DOOR (PRINTED)	(KV-21T1A/21T1B/21T1D)				
	4-203-435-11	DOOR (PRINTED)	(KV-21T1K/21T1L/21T1R				
			21T1U)				

The components identified by shading and marked /!, are critical for safety.

Replace only with the part number specified.

Les composants identifies par une trame et une marque! sont critiques pour la securite.

Ne les remplacer que par une piece portant le numero specifie.

EF NO	PART NO	DESCRIPTION REMARK	REF NO	PART NO	DESCRIPTION	REMAR
		(200 04443)				
.7	*A-1632-484-A	A BOARD, COMPLETE (KV-21M1A)				
	*A-1632-483-A	A BOARD, COMPLETE (KV-21T1A)				
	*A-1632-482-A	A BOARD, COMPLETE (KV-21M1B)				
	*A-1632-481-A	A BOARD, COMPLETE (KV-21T1B)				
	*A-1632-487-A	A BOARD, COMPLETE (KV-21M1D)				
	*A-1632-480-A	A BOARD, COMPLETE (KV-21T1D)				
	*A-1632-486-A	A BOARD, COMPLETE (KV-21M1E)				
	*A-1632-485-A	A BOARD, COMPLETE (KV-21T1E)				
	*A-1632-477-A	A BOARD, COMPLETE (KV-21M1K)				
	*A-1632-478-A	A BOARD, COMPLETE (KV-21T1K)				
	*A-1632-475-A	A BOARD, COMPLETE (KV-21M1L)				
	*A-1632-476-A	A BOARD, COMPLETE (KV-21T1L)				
	*A-1632-479-A	A BOARD, COMPLETE (KV-21T1R)				
	*A-1632-474-A	A BOARD, COMPLETE (KV-21M1U)				
	*A-1632-473-A	A BOARD, COMPLETE (KV-21T1U)				
A	1-571-433-21	SWITCH PUSH (AC POWER)	. 1			
	*4-202-531-01	AC CORD LOCK (SC)				
9	1-690-270-21	CORD, POWER (WITH CONNECTOR)				
0 🗥	1-090-2/0-21	(KV-21M1A/21T1A/21M1B/21T1B/21M1D/				
		21T1D/21M1E/21T1E/21M1K/21T1K/				
		21T1R)				
^	4 500 500 11	CORD, POWER (WITH PLUG)		•		
<u> </u>	1-590-762-11	(KV-21M1L/21T1L/21M1U/21T1U)				
	199	TRANSFORMER ASSY, FLYBACK (UX-1604A2)				
1 🐧	1-453-11-11	TRANSFORMER ASSI, FRIDACK (OR 200 minus)				
2	8-598-331-00	TUNER (BT-AC401) (KV-21M1A/21T1A/21M1E/21T1E/21M1K)	,			
		21T1K)				
	1-693-310-11	TUNER (TELE4-002B)	,			
		(KV-21M1B/21T1B/21M1D/21T1D/21T1R	'			
	1-693-302-11	TUNER (UV1315) (KV-21M1L/21T1L)				
	8-598-333-00	TUNER (BT-AU601) (KV-21M1U/21T1U)				
13	4-369-318-21	SPRING, TENSION	,			
		(KV-21M1A/21T1A/21M1B/21T1B/21M1D	′			
		21T1D/21M1E/21T1E)				
	4-200-433-01	SPRING, EXTENSION	.			
		(KV-21M1K/21T1K/21M1L/21T1L/21T1R	4/			
		21M1U/21T1U)				
24	*4-386-622-11	BAND, DGC				
4	1 000 011 11	(KV-21M1A/21T1A/21M1B/21T1B/21M1D)/			
		21T1D/21M1E/21T1E)				
	*4-386-622-04	BAND, DGC				
	-4-300-022 Va	(KV-21M1K/21T1K/21T1R/21M1U/21T1C	J)			
Δ	1-406-828-11	COIL, DEGAUSSING				
25 💮 🗥	4-203-429-01	COVER (REAR)				
26	4-203-425-01	(KV-21M1A/21T1A/21M1B/21T1B/21M1	0/			
		21T1D/21M1E/21T1E)				
	4 000 407 01	COVER (REAR)				
	4-203-437-01	(KV-21M1K/21T1K/21T1R/21M1U/21T1	U)			
27	4-308-870-00					
28	1-452-032-00					
29	1-452-094-00					
30	X-4387-214-1	PERMALLOY ASSY, CORRECTION				
31	3-701-007-00	BAND, BINDING				
-						

SECTION 7

ELECTRICAL PARTS LIST

• Items marked " * " are not stocked since

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

MF: mF, PF: mmF

 $MMH: mH, \mu H: mH$

they are seldom required for routine service. Some delay should be anticipated when ordering these items.

 All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
 RESISTORS

All resistors are in ohms

F: nonflammable

The components identified by shading and marked $f_{\rm c}$ are critical for safety.

Replace only with the part number specified.

Ne les remplacer que par une piece portant le numero specifie.



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*A-1632-484-A	A BOARD, COMPLETE (KV-21M1A	s)	C016	1-164-005-11	CERAMIC CHIP 0.47MF (KV-21M1A/21T1A/21M1B/	16V
	*A-1632-483-A	A BOARD, COMPLETE (KV-21T1A	.)			21M1E/21T1E/21M1L/ 21M1U/21T1U)	
	*A-1632-482-A	A BOARD, COMPLETE (KV-21M1B)	C017	1-164-005-11	CERAMIC CHIP 0.47MF	16V
	*A-1632-481-A	A BOARD, COMPLETE (KV-21T1B)		1 101 005 11	(KV-21M1A/21T1A/21M1B/ 21M1E/21T1E/21M1L/	21T1B/21M1D/21T1D/
	*A-1632-487-A	A BOARD, COMPLETE (KV-21M1D)	C019	1-124-903-11	21M1U/21T1U)	20% 50V
	*A-1632-480-A	A BOARD, COMPLETE (KV-21T1D)	C020		CERAMIC CHIP 0.1MF	10% 25V
	*A-1632-486-A	A BOARD, COMPLETE (KV-21M1E)	C021 C022		CERAMIC CHIP 0.01MF	50V 20% 50V
	*A-1632-485-A	A BOARD, COMPLETE (KV-21T1E)	C024 C025		CERAMIC CHIP 0.1MF	25V 20% 16V
,	*A-1632-477-A	A BOARD, COMPLETE (KV-21M1K)	C026	1-126-925-11		20% 10V
	*A-1632-478-A	A BOARD, COMPLETE (KV-21T1K)	C027 C028	1-163-038-00	CERAMIC CHIP 100000PF CERAMIC CHIP 0.0047MF	25V
	*A-1632-475-A	A BOARD, COMPLETE (KV-21M1L)	C029 C030	1-163-009-11	CERAMIC CHIP 1000PF CERAMIC CHIP 0.01MF	10% 50V 10% 50V
	*A-1632-476-A	A BOARD, COMPLETE (KV-21T1L)	C031	1-163-009-11	CERAMIC CHIP 1000PF	5% 25V
	*A-1632-479-A	A BOARD, COMPLETE (KV-21T1R)	C034 C036	1-136-157-00 1-164-222-11	FILM 0.022MF CERAMIC CHIP 0.22MF	5% 50V 25V
	*A-1632-474-A	A BOARD, COMPLETE (KV-21M1U)	C101 C102	1-164-005-11	CERAMIC CHIP 0.47MF CERAMIC CHIP 0.47MF	16V 16V
	*A-1632-473-A	A BOARD, COMPLETE (KV-21T1U)	C103		CERAMIC CHIP 0.47MF	16V
	4-201-023-11	SPACER, INSULATING		C104		CERAMIC CHIP 0.01MF	10% 50V (KV-21M1B/21T1B)
	4-202-373-01 4-382-854-11	SPRING, IC SCREW (M3X10), P, SW (+)		C106	1-164-326-91	CERAMIC CHIP MF (KV-2	% V 1M1K/21T1K/21T1R)
	< CAP	ACITOR >		C107	1-164-326-91	CERAMIC CHIP MF (KV-2	% V 1M1K/21T1K/21T1R)
C001 C002	1-163-105-00	CERAMIC CHIP 33PF 5% CERAMIC CHIP 33PF 5%		C109	1-163-038-00	CERAMIC CHIP 0.1MF	25V (KV-21M1B/21T1B)
C004 C005	1-163-117-00 1-126-964-11	CERAMIC CHIP 100PF 5% ELECT 10MF 209	50V % 50V	C110	1-164-232-11	CERAMIC CHIP 0.01MF	10% 50V (KV-21M1B/21T1B)
C006	1-164-004-11	CERAMIC CHIP 0.1MF 105 FILM 0.1MF 5%		C112	1-137-399-11	FILM 0.1MF	5% 50V (KV-21M1B/21T1B)
C008	1-126-965-11						
C010 C011 C012	1-163-031-11 1-163-038-00 1-163-031-11	CERAMIC CHIP 0.01MF CERAMIC CHIP 0.1MF CERAMIC CHIP 10000PF	50V 25V 50V	C114	1-136-169-00	FILM 0.22MF (KV-21M1A/21T1A/21M1D/ 21M1K/21T1K/21M1L/ 21T1U)	
C014 C015	1-163-038-00 1-126-964-11	CERAMIC CHIP 0.1MF ELECT 10MF 20°	25V % 50V		1-136-165-00		5% 50V (KV-21M1B/21T1B)
				C116	1-124-925-11	ELECT 2.2MF	20% 50V (KV-21M1B/21T1B)

									A
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	1		REMARK
C117	1-163-035-00	CERAMIC CHIP 0.047MF	50V	C314	1-163-077-00				50V
C120	1-126-926-11	ELECT 1000MF (KV-21M1A/21T1A/21M1B/	20% 10V	C315 C316	1-163-038-00 1-163-038-00	CERAMIC CHIP (25V 25V
	1-126-925-11		20% 10V	C317 C318	1-163-038-00 1-163-038-00				25V 25V
		21T1R/21M1U/21T1U)		C319 C320	1-163-038-00 1-163-038-00	CERAMIC CHIP			25V 25V
C121 C122		CERAMIC CHIP 0.039MF	5% 50V 10% 50V	C321	1-126-963-11		4.7MF	20%	50V
C123 C124	1-164-665-11	CERAMIC CHIP 33PF CERAMIC CHIP 0.039MF	5% 50V 10% 50V	C322	1-163-099-00		(KV-21	5% 1M1K/21 T 1	
C126	1-126-967-11	ELECT 47MF	20% 16V	C323 C324	1-163-163-00 1-163-119-00			5% 5%	50V 50V
C127 C131	1-126-965-11 1-163-141-00	CERAMIC CHIP 0.001MF	20% 50V 5% 50V	C325	1-163-038-00	CERAMIC CHIP			25V
C134	1_163_463_01	CERAMIC CHIP MF	21M1K/21T1K/21T1R) % V	C326 C327	1-164-004-11 1-163-005-11			10% 10%	25V 50V
C13#	1-103-403-31	(KV-21M1A/21T1A/21M1B/		C328	1-163-035-00			20.0	50V
		21M1E/21T1E)		C329 C330	1-163-016-00 1-164-004-11			10% 10%	50V 25V
C138	1-124-925-11	ELECT 2.2MF	20% 50V	C330	1-104-004-11			10%	
C139	1-124-925-11	ELECT 2.2MF	20% 50V	C332	1-163-038-00	CERAMIC CHIP			25V 50V
C140 C141	1-163-031-11 1-126-965-11	CERAMIC CHIP 0.01MF ELECT 22MF	50V 20% 50V	C333 C335	1-163-033-91	CERAMIC CHIP (10%	50V
C141	1-164-665-11		10% 50V	C336		CERAMIC CHIP		20.0	16V
C117	1 101 000 11			C337	1-162-638-11				16V
C149	1-163-101-00	CERAMIC CHIP 22PF	5% 50V 5% 50V	C338	1-126-965-11	ELECT	22MF	20%	50V
C150 C151	1-163-101-00	CERAMIC CHIP 22PF CERAMIC CHIP 0.001MF	5% 50V 10% 50V	C339		CERAMIC CHIP		20%	50V
CIJI	1-103-009-11	(KV-21M1K/21T1K/21M1L/		C340	1-163-038-00				25V
		21T1U)	,	C341	1-164-232-11			10%	50V
C152	1-126-964-11	ELECT 10MF	20% 50V	C344	1-126-967-11	ELECT	47MF	20%	50V
C153	1-163-097-00	CERAMIC CHIP 15PF	5% 50V	C345	1-163-139-00	CERAMIC CHIP	820PF	10%	50V
		(KV-21M1K/21T1K/21M1L/	21T1L/21T1R/21M1U/	C347	1-163-059-91			10%	50V
*4 = 4	4 462 024 11	21T1U)	EATZ	C348	1-163-031-11	CERAMIC CHIP		(KV-21M1	50V B/21m1B)
C154 C155	1-163-031-11	CERAMIC CHIP 0.01MF	50V 25V	C349	1-126-965-11	ELECT	22MF	20%	50V
	4 440 000 00	4 AUD A 145	05**					(KV-21M1	B/21T1B)
C157 C158	1-163-038-00 1-126-963-11	CERAMIC CHIP 0.1MF ELECT 4.7MF	25V 20% 50V	C350	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C158		CERAMIC CHIP 0.01MF	10% 50V	C353	1-163-117-00			5%	50V
CIVI	1 104 101 11		(KV-21M1B/21T1B)	C354	1-163-197-00	CERAMIC CHIP		10%	50V
C162	1-126-967-11	ELECT 47MF	20% 16V	C355		CERAMIC CHIP		1.0%	50V 100V
C164	1_162_638_11	CERAMIC CHIP 1MF	16V	C358	1-164-232-11	CERAMIC CHIP	U.UIMF	10%	1004
CIOA	1-102-030-11	CDIAMIC CHAI IM	(KV-21M1B/21T1B)	C359	1-126-964-11		10MF	20%	50V
C165	1-126-967-11		20% 16V	C360	1-163-031-11			0.00	50V
C166	1-126-933-11	ELECT 100MF	20% 10V	C401	1-126-967-11 1-163-009-11		47MF	20% 10%	16V 50V
			(KV-21M1B/21T1B)	C402 C404	1-164-346-00			10-9	16V
C168		CERAMIC CHIP 0.001MF	10% 50V						OFT
C169		CERAMIC CHIP 0.001MF	10% 50V	C405		CERAMIC CHIP	0.22MF 4.7MF	20%	25V 50V
C170		CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF	50V 50V	C406 C407	1-126-963-11 1-104-666-11		4./MF 220MF	20%	25V
C200 C300	1-163-059-00		20% 16V	C407	1-126-941-11	ELECT	470MF	20%	25V
				C409	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C301 C302	1-163-077-00	CERAMIC CHIP 0.1MF CERAMIC CHIP 0.047MF	10% 25V 50V	C410	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C302	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	C412	1-163-038-00	CERAMIC CHIP	0.1MF		25V
C304	1-163-059-91	CERAMIC CHIP 0.01MF	10% 50V	C413	1-126-963-11	ELECT	4.7MF	20%	50V
C305	1-124-925-11		20% 50V	C414 C415	1-216-295-00 1-163-009-11		0 5% 0.001MF	1/10V 10%	7 50V
C306	1-136-164-00	FILM 0.082MF	5% 50V	C415				T-0.0	
C307	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C417		CERAMIC CHIP		0.00	50V
C308		CERAMIC CHIP 0.01MF	10% 50V	C501	1-126-963-11	ELECT	4.7MF	20%	50V 50V
C309	1-126-963-11		20% 50V 10% 25V	C502 C503	1-163-077-00	CERAMIC CHIP	1000MF	20%	35V
C310	1-163-077-00	CERAMIC CHIP 0.1MF	10% 25V	C503	1-126-968-11		100MF	20%	50V
C312	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C505	1-126-941-11		470MF	20%	25V
C313	1-163-007-11	CERAMIC CHIP 0.0015MF	10% 50V	C303	1-170-341-11	ETEC 1	2140 I E	200	251

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C506 C507 C508	1-163-009-11 1-124-903-11 1-130-785-11		10% 50V 20% 50V 10% 100V	CF102	1-409-327-00	(KV	Hz) -14E1K/21T1K/21T1R)
C509	1-163-035-00		50V 10% 50V	CF103	1-760-106-11	FILTER, CERAMIC (KV-21M1A/21T1A/21M1E 21M1E/21T1E/21M1E	
C600 C601 A	1-126-967-11 1-136-516-12 1-136-516-12	ELECT 47MF FILM 0.1MF	20% 50V 20% 300V 20% 300V			·	/21T1L/21M1U/21T1U)
C603 À	1-161-964-91	CERAMIC 0.0047MF	250V 250V	CF104 CF105	1-567-101-11 1-760-154-11	FILTER, CERAMIC (KV- TRAP, CERAMIC (KV-21M1B	14E1K/21T1K/21T1R) /21T1B/21M1U/21T1U)
C604 A	1-161-964-91	CAP, ELECT 180MF	2304			(,,
C607	1-104-666-11	ELECT 220MF	20% 25V	SWF101	1-579-120-11	FILTER, SURFACE WAVE	
C608	1-126-964-11	ELECT 10MF	20% 50V				/21M1D/21T1D/21M1E/
C609	1-109-921-11	CERAMIC 0.0015MF	10% 500V		4 570 070 11	21T1E) FILTER, SURFACE WAVE	/grr_21M1g/21m1g\
	4 404 665 44	77 TOTAL 100VP	20% 25V		1-5/9-2/3-11	FILTER, SURFACE WAVE	WA-SIMID WITTID
C610 C611	1-104-665-11 1-126-964-11	ELECT 100MF ELECT 10MF	20% 25V 20% 50V		1-3/3-414-11	(KV	-21M1K/21T1K/21T1R)
	1-113-907-51	CERAMIC 0.0022MF	20% 250V		1-760-711-11	FILTER, SURFACE WAVE	1
C613 A	1-113-907-51	CERAMIC 0.0022MF	20% 250V			(KV-21M1L	/21T1L/21M1U/21T1U)
C614	1-136-538-11	FILM 0.001MF	3% 2KV		4 860 800 44	FILTER, SURFACE WAVE	/prr_21M1p/21m1p)
	4 4 60 004 44	GREAT GUID O AINE	50V	SWF102	1-760-722-11	FILTER, SURFACE WAVE	(KA-SIMID/SILID)
C615 C618	1-163-031-11	CERAMIC CHIP 0.01MF CERAMIC 680PF	10% 2KV		< CON	NECTOR >	
C619	1-102-228-00		10% 500V				
C620	1-124-347-00		20% 160V	CN001	*1-564-508-11	PLUG, CONNECTOR 5P	
C621	1-126-942-61		20% 25V	CN201	*1-564-506-11	PLUG, CONNECTOR 3P (KV-21M1A/21T1A/21M1E	/21m1p/21m1p/21M1p/
			0.00. 1.0**			21T1E/21M1L/21T1I	3/21T15/21T1D/21M1E/ ./21M1H/21T1H)
C622	1-111-041-11	ELECT 0.001F CERAMIC CHIP 0.22MF	20% 16V 25V		*1-564-507-11	PLUG, CONNECTOR 4P	1/ 221120/ 22220/
C625 C626	1-104-661-91	ELECT 330MF	20% 16V			(KV-21M1I	/21M1K/21T1K/21T1R)
C627	1-126-933-11	ELECT 100MF	20% 16V		e de la companio del companio del companio de la companio del companio de la companio de la companio del companio de la companio del companio del companio del companio del companio del la companio del compan	et de desemble	and the superference of the second states
C628 A	1-161-964-91	CERAMIC 0.0047MF	250V	CN602	▲ 1-508-786-00	PIN, CONNECTOR (POWI PIN, CONNECTOR (5MM (KV-21M1A/21T1A/21M1E	PITCH) 2P
C800	1-107-642-91		20% 200V 10% 400V	1 A Mar		(KV-21M1A/21T1A/21M1E 21M1E/21T1E)	/ TILID/ SIMID/ SILID/
C801	1-129-746-00 1-136-109-00		10% 400V 5% 200V	CN603	A 1-508-765-00	PIN, CONNECTOR (5MM	PITCH) 3P
C803 C804		ELECT 0.47MF	20% 50V	Cato Co.			
C806	1-102-244-00		10% 500V	CN801		CONNECTOR PIN (DY)	5P
C807	1-107-651-11	ELECT 4.7MF	20% 250V	CNA81	*1-568-881-51	PIN, CONNECTOR 6P	
C808	1-136-079-00	FILM 0.01MF	3% 2KV	CNA82	*1-568-880-51	PIN, CONNECTOR 5P	
C809	1-161-754-00		10% 2KV 10% 400V		< DIC	DE >	
C810 C811	1-129-702-00 1-102-228-00		10% 400V		\ 210	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
C011	1-102-220-00	CHICALO		D001	8-719-057-56	DIODE LS5360HL	
C812	1-163-059-91	CERAMIC CHIP 0.01MF	10% 50V	D002		DIODE µPC574J	
C813	1-162-115-00	CERAMIC 330PF	10% 2KV	D003	8-719-109-89	DIODE RD5.6ESB2 DIODE RD5.1ES-B2	
C814	1-136-159-00	FILM 0.033MF CERAMIC 680PF	5% 50V 10% 2KV	D004	8-719-991-33	DIODE 1SS133T-77	
C815 C816	1-162-116-00 1-162-114-00	CERAMIC 0.0047MF	2KV	2000			
0010				D006	8-719-991-33	DIODE 1SS133T-77	
C817	1-136-559-11	MYLAR 0.0047MF	10% 400V	D014	8-719-991-33	DIODE 1SS133T-77 DIODE 1SS133T-77	
C818	1-136-933-11	FILM 1MF	5% 100V 10% 500V	D100 D102	8-719-991-33	DIODE 1SS238-TPA7 ()	CV-21M1B/21T1B)
C819	1-162-318-11 1-126-951-11	CERAMIC 0.001MF ELECT 470MF	20% 35V	D104	8-719-903-27	DIODE 1SS238-TPA7 (KV-21M1B/21T1B)
C820 C822	1-126-951-11	FILM 0.015MF	10% 100V	2201			
C022	1 101 070 11			D105	8-719-991-33	DIODE 1SS133T-77 (K	V-21M1K/21T1K/21T1R)
C823	1-106-375-12	MYLAR 0.022MF	10% 250V	D106	8-719-991-33	DIODE 1SS133T-77 (KDIODE 1SS133T-77	A-SIMIK/SILIK/SILIK)
C824	1-106-367-00	MYLAR 0.01MF	10% 400V	D107 D109	8-719-991-33	DIODE 1SV214	
C827	1-164-182-11 1-124-903-11	CERAMIC CHIP 0.0033MF ELECT 1MF	10% 50V 20% 50V	D103	U-/13-02U-/1	(KV-21M1K/21T1K/21M1	L/21T1L/21T1R/21M1U/
C828			200 001			21T1U)	
	< FI	LTER >		D301	8-719-991-33	DIODE 1SS133T-77	
CF101	1-404-901-11	TRAP, CERAMIC		D301	8-719-991-33	DIODE 1SS133T-77	
CLIOI	T-244-00T-TT	(KV-21M1A/21T1A/21M1D/21	T1D/21M1E/21T1E/	D305	1-249-412-11	CARBON 390	
		21M1K/21T1K/21T1R)		D307	8-719-991-33	DIODE 1SS133T-77 (K	V-Z1M1B/Z1T1B) tr_21w1p/21m1p\
	1-409-430-11	TRAP, CERAMIC (KV-21M1E	3/21 T1 B)	D308	8-719-991-33	DIODE 1SS133T-77 (K	V-ZIMID/ZITID)
	1-409-429-11	TRAP, CERAMIC	T1L/21M1U/21T1U)	D310	8-719-991-33	DIODE 1SS133T-77	
		(VA-STHIT)/SI	TIM STRING STITU)	2310	0 117 771 33		

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D315 D401	8-719-991-33 8-719-109-97	DIODE 1SS133T-77 DIODE RD6.8ES-B2		IC002 IC003	8-759-280-74 8-747-905-11	IC ST24C02CB1 IC SBX1790-51	
D402 D403	8-719-109-97 8-719-109-97			IC101	8-759-333-19	21M1K/21T1K/	21M1D/21T1D/21M1E/21T1E/ 21M1L/21T1L/21T1R/21M1U/
D404 D405 D406	8-719-109-97 8-719-109-97 8-719-109-97	DIODE RD6.8ES-B2 DIODE RD6.8ES-B2			8-759-333-17	21T1U) IC TDA9812 (KV-	21M1B/21T1B)
D407 D408	8-719-109-97 8-719-109-97	DIODE RD6.8ES-B2	·	IC301	8-759-333-44	IC MC44007P (KV-21M1A/21T1A/ 21M1U/21T1U)	21M1E/21T1E/21M1L/21T1L/
D409 D410 D412 D414	8-719-109-97 8-719-109-97 8-719-991-33	DIODE RD6.8ES-B2 DIODE 1SS133T-77				IC MC44002P (KV-21M1B/21T1B/ 21T1R)	21M1D/21T1D/21M1K/21T1K/
D501 D600 D601 D602 D603	8-719-046-78	DIODE 1SS133T-77 DIODE EM1-V1 DIODE EU-1Z DIODE EG-1Z-V1		IC302 IC401 IC501 IC601 IC603	8-759-333-46 8-759-041-82 8-759-192-73 8-749-011-02 8-759-337-99	IC TDA1013B IC STV9379	
D604	8-719-312-61				< SOC	KET >	
D605 D606 D607 D608	8-719-979-85 8-719-302-43 8-719-980-78	B DIODE EL1Z B DIODE ERA83-006		J201 J401 J1401	1-568-267-21 1-561-534-00 1-778-054-11	SOCKET, PIN 211	P
D610	8-719-025-88				< CO1	IT >	
D611 D613 D614	8-719-991-33 8-719-109-83 8-719-109-83	DIODE RD5.6ESB2		L101 L105	1-410-669-31 1-408-411-00	INDUCTOR INDUCTOR	33UH 15UH
D801 D802	8-719-950-5 8-719-302-4	7 DIODE BYD33G 3 DIODE EL1Z		L108	1-408-408-00	INDUCTOR (KV-21M1A/21T1A	8.2UH /21M1B/21T1B/21M1D/21T1D/ /21M1L/21T1L/21M1U/21T1U)
D803 D804 D805	8-719-945-8 8-719-028-7 8-719-928-0	DIODE RGP02-17EL-6433 B DIODE ERD28-08S			1-408-405-00		4.7UH (KV-21M1K/21T1K/21T1R)
D806 D807	8-719-302-4 8-719-991-3	3 DIODE 1SS133T-77		L109 L110 L111	1-403-686-12 1-410-673-41 1-410-665-31	INDUCTOR	68UH 15UH (KV-21M1B/21T1B)
D809	8-719-302-4	3 DIODE EL1Z		L112	1-408-417-00	INDUCTOR	47UH 0.22UH
	< F	USE >		L113	1-410-985-11		
F601	1-576-231-1 1-533-725-1	1 FUSE (H.B.C.) 4A, 250 1 HOLDER, FUSE; F601 (KV-21M1A/21T1A/21M1B/		L201 L401 L602	1-412-531-31 1-408-409-00 1-408-609-41	INDUCTOR INDUCTOR	33UH 10UH 33UH
	A 1-533-230-1	21M1E/21T1E) 2 HOLDER, FUSE; F601 (KV-21M1K/21T1K/21M1L/		L603 L604	1-410-669-31 1-408-417-00	INDUCTOR	33UH 47UH
		21T1U)	2111D/2111R/21M10/	L800 L801	1-412-553-11 1-420-872-00	INDUCTOR COIL, AIR-CORE	3.3ММН
WD 401		FERRITE BEAD > 21 FERRITE BEAD INDUCTOR	1.10H	L802	1-407-365-00		A/21M1B/21T1B/21M1D/21T1D/
FB001 FB002 FB601 FB603 FB604	1-410-397-2 1-410-397-2	21 FERRITE BEAD INDUCTOR 21 FERRITE BEAD INDUCTOR 21 FERRITE BEAD INDUCTOR 21 FERRITE BEAD INDUCTOR	1.1UH 1.1UH 1.1UH			21T1U)	K/21M1L/21T1L/21T1R/21M1U/
FB605 FB801	1-410-396-	41 FERRITE BEAD INDUCTOR	0.45UH 0.45UH	L803 L804 L805 L806	1-459-390-00 1-459-105-23 1-412-531-33 1-459-652-13		RE) 33UH
		IC >		1000		C LINK >	
IC001		69 IC SAA5288ZP/014 (KV-21M1A/21M1B/21M1D, 21M1U) 23 IC SAA5290ZP/014	/21M1E/21M1K/21M1L/	PS602 PS603	* 4 522_505_0	1 T.TMK TC 2.73	(ICP-F75) (ICP-F75)
	8-759-300-	(KV-21T1A/21T1B/21T1D 21T1R/21T1U)	/21T1E/21T1K/21T1L/				

A										
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	ON		REMARK	
-	< TI	RANSISTOR >		JR011	1-216-295-00	METAL GLAZE	0	5%	1/10W	
0001	0 720 022 66	manufamon 2002/10cm		TD012	1 216 205 00	MEMBI CINTE	٥	E0,	(KV-21M1B/21T1B)	
Q001	8-729-922-66			JR012	1-216-295-00	METAL GLAZE	0 .	5%	1/10W	
Q002	8-729-119-76			JR013	1-216-295-00	METAL GLAZE	0	5%	1/10W	
Q005	8-729-920-74			JR014	1-216-296-00	METAL GLAZE	0	5%	1/8W	
Q006	8-729-119-76									
Q007	8-729-119-78	TRANSISTOR 2SC2785-HFE		JR015	1-216-295-00		0	5%	1/10W	
				JR017	1-216-295-00	METAL GLAZE	0	5%	1/10W	
Q008	8-729-119-78			JR018	1-216-296-00		0	5%	1/8W	
Q009	8-729-119-78	TRANSISTOR 2SC2785-HFE		JR019	1-216-296-00	METAL GLAZE	0	5%	1/8W	
Q010	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR021	1-216-296-00	METAL GLAZE	0	5%	1/8W	
Q011	8-729-900-89	TRANSISTOR DTC144ES								
Q012	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR022	1-216-296-00	METAL GLAZE	0	5%	1/8W	
-		-		JR023	1-216-295-00	METAL GLAZE	0	5%	1/10W	
Q013	8-729-920-74	TRANSISTOR 2SC2412K-QR		JR027	1-216-296-00	METAL GLAZE	0	5%	1/8W	
Q014	8-729-920-74			JR028	1-216-296-00	METAL GLAZE	0	5%	1/8W	
Q015	8-729-920-74			JR029	1-216-295-00	METAL GLAZE	Õ	5%	1/10W	
Q016	8-729-216-22			******			•	•	-/	
Q100	8-729-901-01			JR030	1-216-296-00	METAL GLAZE	0	5%	1/8W	
Q100	0 723 301 01	INMIDION DICITION		JR031	1-216-296-00	METAL GLAZE	0	5%	1/8W	
0101	0_710_000_00	MDANGTOMOD DMC11/FC (V)	מרת (מרת 1 כי 1 אור _{- מ} י	JR032	1-216-296-00	METAL GLAZE	0	5%	1/8W	
Q101	8-729-900-80									
Q102	8-729-900-80			JR034	1-216-296-00	METAL GLAZE	0	5%	1/8W	
Q103	8-729-900-80		A-SIWIR/SILIR)	JR035	1-216-295-00	METAL GLAZE	0	5%	1/10W	
Q105	8-729-901-01								4 (44)	
Q107	8-729-119-78	TRANSISTOR 2SC2785-HFE		JW101	1-249-413-11	CARBON	470	5%	1/4W	
-144							4		4.4000	
Q109	8-729-022-54	TRANSISTOR 2SC3779C, D-1		R001	1-216-198-91	METAL GLAZE	1K	5%	1/8W	
			(KV-21M1B/21T1B)	R002	1-216-033-00	METAL GLAZE	2.2K	5%	1/10W	
Q111	8-729-900-89			R005	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
		(KV-21	LM1K/21T1K/21T1R)							
Q112	8-729-119-78	TRANSISTOR 2SC2785-HFE		R006	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
						(KV-21M1A/21T)	LA/21M1	E/21	T1E/21M1L/21T1L/	
Q113	8-729-900-89	TRANSISTOR DTC144ES				21M1U/21T	LU)			
		(KV-21	LM1K/21T1K/21T1R)		1-216-085-00	METAL GLAZE	33K	5%	1/10W	
Q114	8-729-901-01	TRANSISTOR DTC144EK				(KV-21M1B/21T)	LB/21M1	D/21	T1D/21M1K/21T1K/	
Q115	8-729-026-41	TRANSISTOR 2SA933AS-RT	(KV-21M1B/21T1B)			21T1R)				
Q116	8-729-900-89									
-				R008	1-216-031-00	METAL GLAZE	180	5%	1/10W	
Q300	8-729-900-80	TRANSISTOR DTC114ES		R009	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
Q301	8-729-119-78			R010	1-216-041-00	METAL GLAZE	470	5%	1/10W	
Q302	8-729-900-80		· ·	R011	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
Q303	8-729-900-80			R012	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
Q304	8-729-900-80									
2002				R013	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
Q305	8-729-900-80	TRANSISTOR DTC114ES		R014	1-216-065-00	METAL GLAZE	4.7K		1/10W	
Q306	8-729-900-80			R015	1-216-065-00	METAL GLAZE	4.7K		1/10W	
Q307		TRANSISTOR 2SA933AS-RT	(KV-21M1R/21T1R)	R016	1-216-025-00		100	5%	1/10W	
Q308		TRANSISTOR DTC144EK	(114 21112) 01112)	R017	1-216-025-00	METAL GLAZE	100	5%	1/10W	
Ø200	0-123-301-01	(KV-21M1B/21T1B/21M1D/21	m1n/21M1K/21m1K/	NO17	1-210-023-00	MEIAH GEREE	100	J.0	T/ TOH	
		21T1K/21T1R)	TEN ATMENIATION	R018	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
		ZIIIK/ZIIIK/		R019	1-216-174-00	METAL GLAZE	100	5%	1/8W	
0401	0 720 110 70	TRANSISTOR 2SC2785-HFE		R020	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
Q401		TRANSISTOR 2SA1162-G		R021	1-216-174-00		100	5%	1/8W	
Q402		TRANSISTOR 2SC2412K-OR								
Q403				R022	1-216-295-00	METAL GLAZE	0	5%	1/10W	
Q404		TRANSISTOR 2SC2412K-QR		7004	4 046 000 00		4.77.00	ro.	4 /4 001	
Q600	8-729-119-78	TRANSISTOR 2SC2785-HFE		R024	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
				R025	1-216-222-00		10K	5%	1/8W	
Q602	8-729-900-65	TRANSISTOR DTA144ES		R026	1-216-081-00		22K	5%	1/10W	
Q801		TRANSISTOR 2SD774-34	_	R027	1-216-206-00	METAL GLAZE		5%	1/8W	
Q802		TRANSISTOR S2000N-16E30	5A	R028	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
Q803	8-729-900-89									
Q804	8-729-019-01	TRANSISTOR 2SD2394-EF		R029	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
				R030	1-215-900-11		22K	5%	2W F	
Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE		R031	1-216-065-00		4.7K	5%	1/10W	
				R032	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
	< RES	SISTOR >		R033	1-216-049-00		1K	5%	1/10W	
JR003	1-216-296-00	METAL GLAZE 0 5%	1/8W	R034	1-249-429-11	CARBON	10K	5%	1/4W	
JR004	1-216-296-00	METAL GLAZE 0 5%	1/8W	R035	1-247-863-91		22K	5%	1/4W	
JR007	1-216-295-00		1/10W	R036	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
JR008	1-216-295-00		1/10W	R037	1-216-057-00		2.2K	5%	1/10W	
JR009	1-216-295-00		1/10W	R039	1-216-089-00		47K	5%	1/10W	
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REF.NO.	PART NO.	DESCRIPTION	<u>!</u>		REMARK	REF.NO.	PART NO.	DESCRIPTION			REMARK	
R040 R042	1-216-065-00 1-216-230-00	METAL GLAZE METAL GLAZE	22K	5% 5%	1/10W 1/8W	R115	1-216-057-00	METAL GLAZE	2.2K	5% (1/10W KV-21M1B/21T1B)	
R044	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R116	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R045	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R117	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R046	1-216-105-91	METAL GLAZE	220K	5%	1/10W	R118	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
				=0	4 /4 077	R122	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R047	1-216-077-00	METAL GLAZE	15K	5%	1/10W		1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R048	1-216-174-00	METAL GLAZE	100	5%	1/8W	R123	1-210-003-00	MEIRO GURDE	2/1	3.0	2/ 2011	
R049	1-216-041-00	METAL GLAZE	470	5%	1/10W	m104	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R052	1-216-238-91	METAL GLAZE	47K	5%	1/8W	R124	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R055	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	R125		METAL GLAZE	100	5%	1/10W	
3.000						R126	1-216-025-00	METAL GLAZE	180	5%	1/8W	
R060	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	R127	1-216-180-00	METAL GLAZE	10K	5%	1/10W	
R061	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R128	1-216-073-00	METAL GLAZE	IUK	20	1/104	
R062	1-216-073-00	METAL GLAZE	10K	5%	1/10W			## PPAN	107	E0,	1 / 450	
R063	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	R133	1-249-429-11	CARBON	10K	5%	1/4W	
R064	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R134	1-216-031-00	METAL GLAZE	180	5%	1/10W	
KUU4	1-210-075-00	111111111111111111111111111111111111111						(KV-21M1A/21T1	A/ZIMI	B/21	T1B/21M1D/21T1D/	
DOCE	1-216-073-00	METAL GLAZE	10K	5%	1/10W			21M1E/21T1				
R065	1-216-073-00	METAL GLAZE	10K	5%	1/10W		1-216-029-11	METAL GLAZE	150	5%	1/10W	
R066	1-216-073-00	METAL GLAZE	22K	5%	1/10W			(K	V-21M1	L/21	T1L/21M1U/21T1U)	
R067		METAL GLAZE	10K	5%	1/10W							
R068	1-216-073-00		22K	5%	1/4W	R136	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R069	1-247-863-91	CARBON	44N	30	1/211	R137	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
			4 77	5%	1/10W	R138	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R070	1-216-065-00		4.7K		·	R141	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R071	1-216-081-00	METAL GLAZE	22K	5%	1/10W	R142	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R072	1-216-230-00		22K	5%	1/8W	KISA	1 210 037 00					
R073	1-216-089-00	METAL GLAZE	47K	5%	1/10W	D142	1-216-295-00	METAL GLAZE	0	5%	1/10W	
R074	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R143	1-216-295-00	METAL GLAZE	2.2K		1/8W	
						R144	1-210-200-00	METAD OFFICE	(X	V-21	M1K/21T1K/21T1R)	
R075	1-249-436-11		39K	5%	1/4W	-445	1 216 20600	METAL GLAZE	2.2K		1/8W	
R078	1-216-071-00	METAL GLAZE	8.2K		1/10W	R145	1-216-206-00	MEIND GENED	/ T	rv-21	M1K/21T1K/21T1R)	
R079	1-216-061-00		3.3K	5%	1/10W				(*	.,		
R080	1-216-057-00		2.2K	5%	1/10W		4 046 042 04	AMMAR OF STE	560	5%	1/10W	
R081	1-249-438-11		56K	5%	1/4W	R146	1-216-043-91	METAL GLAZE		5%	1/10W	
KOOT	1 215 100 11					R147	1-216-043-91	METAL GLAZE	560	36 77 31	M1K/21T1K/21T1R)	
R088	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W							
	1-216-061-00		3.3K		1/10W	R149	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R089			3.3K		1/10W				(1	(V-21	M1K/21T1K/21T1R)	
R090	1-216-061-00 1-249-427-11		6.8K		1/4W						4 44 600	
R091	1-216-065-00		4.7K	5%	1/10W	R151	1-216-097-00	METAL GLAZE	100K	5%	1/10W	,
R093	1-210-000-00	MEIND GHAM	20/40	3.0	-/				1K/21M	1L/2	1T1L/21T1R/21M1U/	!
	4 445 405 40	MINAT CTATE	33K	5%	1/10W			21T1U)				
R094	1-216-085-00		22K	5%	1/10W	R153	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R095	1-216-081-00	METAL GLAZE		5%	1/10W	1,233		(KV-21M1K/21T	1K/21M	1L/2	1T1L/21T1R/21M1U,	/
R096	1-216-033-00	METAL GLAZE	220		1/10W			21T1U)				
R097	1-216-051-00	METAL GLAZE	1.2K									
R098	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	D154	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
				-	4 /07/	R154 R155	1-216-021-00	METAL GLAZE	22K	5%	and the second	
R099		METAL GLAZE	1.2K		1/8W	R155	1-210-001-00	METAL GLAZE	1K	5%	1/10W	
R102	1-216-234-00		33K	5%	1/8W	KT21	1-210-049-00	THILIM CAMERA			(KV-21M1B/21T1B))
R104	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W							
					(KV-21M1B/21T1B)	7150	1 216 020.00	METAL GLAZE	390	5%	1/10W	
R105	1-216-025-00	METAL GLAZE	100	5%	1/10W	R158	T-7T0-023-00	/KA-21M17/21W	13/21M	2/ח1	1T1D/21M1E/21T1E	/
					(KV-21M1B/21T1B)			71M1E/21T	1 V / 21M	11./2	1T1L/21T1R/21M1U	1
									1K/ 41M	-11/ C	TITHI BITTINI BINITO	
R106	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	i		21T1U)	100	E0.	1/10W	
KIOO	1-210-033 0	,			(KV-21M1B/21T1B)		1-216-031-00	METAL GLAZE	180	5%		١
****	1 216 017 0	1 METAL GLAZE	47	5%	1/10W						(KV-21M1B/21T1B	1
R107	1-210-01/-9	T THE THE GUND			(KV-21M1B/21T1B)						4 /4 Ava	
	4 446 467 4	A SERVICE OF SER	5 6V	5%	1/10W	R159	1-216-061-00	METAL GLAZE		5%		
R108	1-216-067-0	METAL GLAZE	2.07	J'0	-1 -411	R160	1-216-238-91	METAL GLAZE	47K			
			100	5%	1/10W	R161	1-216-295-00	METAL GLAZE	0	5%		. ,
R109	1-216-025-0	O METAL GLAZE	100			11.02		(KV-21M1A/21T	1A/21M	11D/2	1T1D/21M1E/21T1E	/
			4-4-		(KV-21M1B/21T1B)			21M1K/217	1K/21M	11L/2	1T1L/21T1R/21M1U	1
R110	1-216-101-0	0 METAL GLAZE		5%	1/10W			21T1U)				
R111	1-216-085-0	O METAL GLAZE	33K	5%	1/10W			411101				
R112	1-216-057-0	O METAL GLAZE	2.21	5%	1/10W	-4-50	1 016 017 01	METAL GLAZE	47	5%	6 1/10W	
					(KV-21M1B/21T1B)	R162	1-210-01/-91	MEIND GUNDE	21	J-1	(KV-21M1B/21T1B	5)
							4 646 469 44	CARRON	150	59		
R113	1-216-057-0	0 METAL GLAZE	2.2F	5%	1/10W	R163	1-249-407-11	CARBON CTACT		K 59		
7777	4 220 037 0				(KV-21M1B/21T1B)	R167	1-216-246-00	METAL GLAZE				
p114	1-216-073-0	0 METAL GLAZE	10K	5%		R168	1-249-407-13	L CARBON	150	27	O T/311	
R114		· mitte deren			(KV-21M1B/21T1B)							
	*.**				1	1						



The components identified by shading and marked i are critical for safety.

Replace only with the part number specified.

Les composants identifies par une trame et une marque i sont critiques pour la securite.

Ne les remplacer que par une piece portant le numero specifie.

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REF.NO.	PART NO.	DESCRIPTIO	N		REMARK	REF.NO.	PART NO.	DESCRIPTION	ON		REMARK
R169	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R349	1-216-105-91	METAL GLAZE	220K	5%	1/10W
	4 444 444 44				KV-21M1B/21T1B)	9				(KV-21M1B/21T1B)
R170	1-216-063-00	METAL GLAZE	3.9K	5% (1	1/10W KV-21M1B/21T1B)	R350	1-216-033-00	METAL GLAZE	220	5%	1/10W KV-21M1B/21T1B)
R171	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W					·	,
				(1	KV-21M1B/21T1B)	R351	1-216-292-11		8.2M 1B/21M1		1/8W 1D/21M1K/21T1K/
R175	1-216-049-00		1K	5%	1/10W			21T1R)			
R176	1-216-049-00		1K	5%	1/10W	R352	1-216-262-00	METAL GLAZE	470K		1/8W
R177 R178	1-216-295-00 1-216-055-00	METAL GLAZE METAL GLAZE	0 1.8K	5% 5%	1/10W 1/10W	R353	1-247-804-11	CARBON	75	5%	1/4W
R179	1-216-212-00	METAL GLAZE	3.9K	5%	1/8W	R354	1-216-025-00	METAL GLAZE	100	5%	1/10W
7100	1 016 040 00		1 10	F0.	1 /1 077	R355	1-216-121-91		1M	5%	1/10W
R180	1-216-049-00	METAL GLAZE	1K	5% (1	1/10W CV-21M1B/21T1B)	R356 R357	1-216-119-00 1-216-095-00		820K 82K	5% 5%	1/10W 1/10W
R181	1-216-182-00	METAL GLAZE	220	5%	1/8W	R358	1-216-099-00		22	5%	1/10W
R182	1-216-182-00	METAL GLAZE	220	5%	1/8W						
R205	1-247-741-11	CARBON	150	5%	1/2W	R359 R361	1-216-089-00 1-216-023-00	METAL GLAZE	47K 82	5% 5%	1/10W 1/10W
R301	1-216-073-00	METAL GLAZE	10K	5%	1/10W	R362	1-216-023-00	METAL GLAZE	82	5%	1/10W
R302	1-216-037-00		330	5%	1/10W	R363	1-216-023-00	METAL GLAZE	82	5%	1/10W
R303 R304	1-216-090-00 1-216-025-00	METAL GLAZE METAL GLAZE	51K 100	5% 5%	1/10W 1/10W	R401	1-216-041-00	METAL GLAZE	470	5%	1/10W
R305	1-216-025-00	METAL GLAZE	100	5%	1/10W 1/10W	R402	1-249-431-11	CARBON	15K	5%	1/4W
						R403	1-249-431-11	CARBON	15K	5%	1/4W
R306 R307	1-216-113-00	METAL GLAZE METAL GLAZE	470K	5% 5%	1/10W 1/10W	R405	1-249-389-11		4.7	5%	1/4W F
R308	1-216-121-91 1-216-234-00	METAL GLAZE	1M 33K	5%	1/8W	R406 R407	1-216-091-00 1-216-041-00	METAL GLAZE	56K 470	5% 5%	1/10W 1/10W
R309	1-216-121-91	METAL GLAZE	1M	5%	1/10W			3		-	-,
R310	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R408	1-216-033-00	METAL GLAZE	220	5%	1/10W
R311	1-216-093-00	METAL GLAZE	68K	5%	1/10W	R409	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R312	1-216-097-00	METAL GLAZE	100K	5%	1/10W	R410	1-247-804-11		75	5%	1/4W
R313 R314	1-216-045-00 1-216-045-00	METAL GLAZE	680 680	5% 5%	1/10W 1/10W						B/21M1D/21T1D/
R315	1-216-045-00	METAL GLAZE	680	5%	1/10W 1/10W		1-247-698-11	21M1E/21T1 METAL GLAZE	.E/21M1.	K/21T1 5%	1/4W
>							2 44, 050 12				L/21M1U/21T1U)
R316	1-216-033-00	METAL GLAZE	220	5%	1/10W	D/11	1 016 005 00	WMM17 OF 177	227	F0.	1 /1 Ora
R317 R318	1-216-182-00 1-216-019-00	METAL GLAZE	220 56	5% 5%	1/8W 1/10W	R411 R412	1-216-085-00 1-216-105-91	METAL GLAZE	33K 220K	5% 5%	1/10W 1/10W
R322	1-216-022-00	METAL GLAZE	75	5%	1/10W	R413	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R323	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R414	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R325	1-216-089-00	METAL GLAZE	47K	5%	1/10W	R415	1-216-222-00	METAL GLAZE	10K	5%	1/8W
R326	1-216-095-00	METAL GLAZE	82K	5%	1/10W	R416	1-216-081-00	METAL GLAZE	22K	5%	1/10W
			B/21M1I)/21T1	D/21M1K/21T1K/	R417	1-216-295-00	METAL GLAZE	0	5%	1/10W
		21T1R)				R501 R502	1-208-806-11 1-216-677-11	METAL CHIP	10K 12K		6 1/10W 6 1/10W
R327	1-216-097-00	METAL GLAZE	100K		1/10W	R503	1-216-081-00	METAL GLAZE	22K	5%	1/10W
		(KV-21M1B/21T1	B/21M1I)/21T1	D/21M1K/21T1K/	DEGA	1-016 005 00	MEMA? OTTE	015	Eo.	1 /100
R328	1-216-258-00	21T1R) METAL GLAZE	330K	5%	1/8W	R504 R505	1-216-095-00 1-216-075-00	METAL GLAZE	82K 12K	5% 5%	1/10W 1/10W
R330	1-216-069-00	METAL GLAZE	6.8K		1/10W	R506	1-216-080-00	METAL GLAZE	20K	5%	1/10W
D222	1 216 027 00	WOMAT CTARE	220	EQ.	1/10W	R507	1-216-350-11	METAL OXIDE	1.2	5%	1W F
R333 R334	1-216-037-00 1-216-025-71	METAL GLAZE METAL GLAZE	330 100	5% 5%	1/10W 1/10W	R508	1-215-865-11	METAL OXIDE	220	5%	1W F
R335	1-216-295-00	METAL GLAZE	0	5%	1/10W	R509	1-249-387-11	CARBON	3.3	5%	1/4W F
R336	1-216-296-00	METAL GLAZE	0	5%	1/8W	R600	1-216-365-00	METAL OXIDE	0.47	5%	2W F
R337	1-216-295-00	METAL GLAZE	0	5%	1/10W	R601 &	1-205-909-11	WIREWOUND METAL OXIDE	3.3 15	5% 5%	10W 1W F
R339	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	R604	1-215-927-00	METAL OXIDE	47K	5%	3W F
R340	1-216-121-91	METAL GLAZE	1M	5%	1/10W	2000			4 ^ ^	PO.	4 / 477
R341 R342	1-216-093-00 1-216-186-00	METAL GLAZE	68K 330	5% 5%	1/10W 1/8W	R606 R607	1-249-441-11 1-216-366-00	CARBON METAL OXIDE	100K 0.56	5% 5%	1/4W 2W F
R343	1-216-295-00	METAL GLAZE	0	5%	1/10W	R608	1-216-645-11	METAL CHIP	560		1/10W
						R609	1-215-859-00	METAL OXIDE	22	5%	1W F
R344 R345	1-216-295-00 1-216-238-91	METAL GLAZE		5% 5%	1/10W 1/8W	R610	1-249-419-11	CARBON	1.5K	5%	1/4W
R347	1-216-238-91	METAL GLAZE		5%	1/10W	R611	1-215-430-00	METAL	2.4K	1%	1/4W
				(K	V-21M1B/21T1B)	R612 A	1-202-719-91	SOLID	1M	10%	1/2W
R348	1-216-073-00	METAL GLAZE	10K	5% / 873	1/10W		1-218-265-21				1W
				. (A)	V-21M1B/21T1B)	R615	1-217-418-61	LOSIBLE	0.47	10%	1/2W F

The components identified by shading and marked $\langle r_{\rm c}\rangle$ are critical for safety.

Replace only with the part number specified.

Les composants identifies par une trame et une marque in sont critiques pour la securite.

Ne les remplacer que par une piece portant le numero specifie.



REF.NO.	PART NO.	DESCRIPTIO	N		F	REMARK	REF.NO.	PART NO.	DESCRIPTIO	N		REMARK
R617	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	:		< THE	RMISTOR >			
R618 R620 R621 R622 R623	1-216-659-11 1-215-479-00 1-249-429-11 1-247-895-91 1-216-081-00	METAL CARBON METAL GLAZE	2.2K 270K 10K 470K 22K	0.50% 1% 5% 5% 5%	1/10W 1/4W 1/4W 1/4W 1/10W		THP601 A	059 < TUN	ER > TUNER (BT-AC4	101)	m1m / 2114	17/01m17\
R624 R625 R626 R627 R630	1-216-033-00 1-216-073-00 1-216-089-00 1-216-346-00 1-249-401-11	METAL GLAZE METAL GLAZE METAL OXIDE	220 10K 47K 0.56 47	5% 5% 5% 5%	1/10W 1/10W 1/10W 1W 1/4W	F		1-693-302-11 8-598-333-00	(KV-21M1A/21T: TUNER (TELE4- (KV-21M: TUNER (UV131: TUNER (BT-AU)	-002B) LB/21T1B/21 5) (KV-21M1	M1D/21T L/21T1L	1D/21T1R)
R800 R801 R802 R803 R804	1-215-887-00 1-247-891-00 1-247-807-31 1-216-081-00 1-217-778-11	METAL GLAZE	150 330K 100 22K 1K	5% 5% 5% 5%	2W 1/4W 1/4W 1/10W 1W	F F	X001 X301 X302	1-578-774-11 1-760-907-21	VIBRATOR, CR. VIBRATOR, CR. VIBRATOR, CR.	YSTAL (KV-21 YSTAL		
R806 R807 R808 R810 R811	1-216-349-00 1-249-399-11 1-202-833-11 1-247-895-91 1-215-890-11	METAL GLAZE SOLID CARBON	1 33 18K 470K 470	5% 5% 10% 5%	1W 1/10W 1/2W 1/4W 2W	F		*A-1638-074-A		PLETE		
R812 R813 R814 R815 R816	1-215-869-11 1-216-266-00 1-249-443-11 1-216-250-00 1-216-369-00	METAL GLAZE CARBON METAL GLAZE	1K 680K 0.47 150K	5% 5% 5% 5%	1W 1/8W 1/4W 1/8W 2W	F F	C701 C702 C703 C704 C705	1-102-074-00 1-102-117-00 1-102-117-00 1-102-824-00 1-102-824-00	CERAMIC CHIP	820PF 470PF	10% 10% 10% 5% 5%	50V 50V 50V 50V 50V
R817 R818 R819 R820 R821	1-216-447-00 1-202-813-00 1-249-441-11 1-249-935-11 1-216-295-00	SOLID CARBON CARBON	27 22K 100K 3.3K		2W 1/2W 1/4W 1/4W 1/10W	F	C706 C707 C709 C710 C711	1-102-824-00 1-107-651-11 1-162-114-00 1-126-967-11 1-101-880-00	CERAMIC	470PF 4.7MF 0.0047MF 47MF 47PF	5% 20% 20% 5%	50V 250V 2KV 16V 50V
R822 R823 R824 R825 R828	1-216-107-00 1-249-413-11 1-216-125-00 1-216-105-91 1-216-115-00	CARBON METAL GLAZE METAL GLAZE	270K 470 1.5K 220K 560K	5% 5% 5%	1/10W 1/4W 1/10W 1/10W 1/10W	F	C712 C713	1-101-880-00 1-101-880-00 < COI	CERAMIC CERAMIC VNECTOR >	47PF 47PF	5% 5%	50V 50V
R834 R835	1-215-869-11 1-249-413-11	METAL OXIDE CARBON	1K 470	5% 5%	1W 1/4W	F	CNC71 CNC72 CNC73 CNC76			OR 5P		
		RIABLE RESISTO						< DI	ODE >			
RV102 RV801	1-241-630-11 < SW	RES, ADJ, ME RES, ADJ, CA ITCH >	RBON 1	(1	n KV-21M1	B/21T1B)	D701 D702 D703 D704 D705	8-719-991-33 8-719-991-33 8-719-991-33	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133	T-77 T-77 T-77		
S001 S002 S003 S004 S005	1-571-532-21 1-571-532-21 1-571-532-21	SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT SWITCH, TACT	IL IL IL				D706 D707 D708 D709 D716	8-719-991-33 8-719-991-33 8-719-991-33	DIODE 1SS133 DIODE 1SS133 DIODE 1SS133 DIODE 1SS133	T-77 T-77 T-77		
S006 S601 A	1-571-433-21	SWITCH, TACT	IL (AC P	OWER)	a servicio	Alman Line	D717 D718 D719	8-719-054-81 8-719-991-33	DIODE 1SS292 DIODE 1SS133 DIODE 1SS292	: T-77		
T602 △ T801	1-427-962-11 1-429-207-11 1-437-090-31	ANSFORMER > TRANSFORMER, TRANSFORMER, HDT TRANSFORMER	CONVE	RTER	مقتن توه يد	[741/U2E]	D723 D724	8-719-991-33 8-719-054-81 < CR	DIODE 1SS133 DIODE 1SS292 T SOCKET >	T-77	en en	
1961 - 1862 - 1 863 (175)							J/01	1-526-990-21	SOURET, CKT	Water of the same	-	Commence of Contract



DESCRIPTION REMARK REF.NO. PART NO. < TRANSISTOR > 8-729-119-78 TRANSISTOR 2SC2785-HFE Q701 TRANSISTOR 2SC2785-HFE Q702 8-729-119-78 0703 8-729-119-78 TRANSISTOR .2SC2785-HFE Q704 8-729-906-70 TRANSISTOR BF871-127 8-729-906-70 TRANSISTOR BF871-127 Q705 0706 8-729-906-70 TRANSISTOR BF871-127 8-729-200-17 TRANSISTOR 2SA1091-0 0707 0708 8-729-200-17 TRANSISTOR 2SA1091-0 8-729-200-17 TRANSISTOR 2SA1091-0 Q709 < RESISTOR > R700 1-260-087-81 CARBON 100 1/2W 1/4W 5% 1-249-417-11 CARBON R701 1K R702 1-249-417-11 CARBON 1K 5% 1/4W 1-247-791-91 1/4W CARBON 22 R705 1/4W 1-247-791-91 CARBON R706 1-247-791-91 CARBON 22 1/4W R707 220 5% 1/4W 1-247-815-91 CARBON R708 5% 220 1/4W R709 1-247-815-91 CARBON R710 1-247-815-91 CARBON 220 1/4W 1/4W 1-249-417-11 CARBON R711 5% R714 1-249-417-11 CARBON 1K 1/4W CARBON 1K 5% 1/4W 1-249-417-11 R715 CARBON 1K 5% 1/4W 1-249-417-11 R716 1/2W 3.3K 5% R717 1-247-758-11 CARBON R718 1-247-758-11 CARBON 3.3K 5% 1/2W 3.3K 5% 1/2W R719 1-247-758-11 CARBON 5% R720 1-216-487-11 METAL OXIDE 12K 3W F 1-216-487-11 METAL OXIDE 12K 3W F R721 5% F 1-216-487-11 METAL OXIDE 12K 3W R722 1-202-814-91 10% 1/2W R724 SOLID 33K 1-202-846-00 10% 1/2W SOLID 470K R725 10% 1/2W 1-202-844-00 330K R726 SOLID 1/2W R727 1-202-848-00 SOLID 680K 10% METAL OXIDE 0.82 5% 1W 1-216-348-00 R729 1/4W 220 1-247-815-91 CARBON R734 R735 1-247-815-91 CARBON 220 1/4W 220 1-247-815-91 CARBON 5% 1/4W R736 1/2W R744 1-247-756-11 CARBON 2.2K 5% R745 1-247-756-11 CARBON 2.2K 5% 1/2W 1/2W 1-247-756-11 CARBON 2.2K R746

< VARIABLE RESISTOR >

RV701 RV702 1-230-641-11 RES, ADJ, METAL GLAZE 2.2M 1-241-656-21 RES, ADJ, METAL GLAZE 110M

The components identified by shading and marked . are critical for safety.

Replace only with the part number specified.

PART NO.

REF.NO.

Les composants identifies par une trame et une marque r sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

REMARK

			CELLANEOUS
	À	1-406-828-11 1-452-032-00	COIL, DEGAUSSING MAGNET, DISC; 10MM Ø MAGNET, ROTATABLE DISK; 15MM Ø
	À	1-452-094-00 1-452-277-00 1-453-169-11	MAGNET, BMC
		1-503-258-21	SPEAKER (KV-21M1A/21T1A/21M1B/21T1B/21M1D/21T1D/
	A	1-504-899-11 1-540-006-22	21M1E/21T1E/21M1L/21T1L/21M1U/21T1U) SPEAKER (9X5CM) (KV-21M1K/21T1K/21T1R) CAP ASSY, HIGH-VOLTAGE
		1-571-433-21 1-690-270-21	CORD, POWER (WITH CONNECTOR)
			2.5A/250V (KV-21M1A/21T1A/21M1B/21T1B/21M1D/21T1D/ 21M1E/21T1E/21M1L/21T1L/21M1U/21T1U)
	Δ	1-590-762-11	CORD, POWER (WITH PLUG) 2.5A/250V (KV-21M1L/21T1L/21M1U/21T1U)
		8-598-331-00	TUNER (BT-AC401) (KV-21M1A/21T1A/21M1E/21T1E/21M1K/21T1K)
		1-693-310-11	TUNER (TELE4-002B) (KV-21M1B/21T1B/21M1D/21T1D/21T1R)
		1-693-302-11 8-598-333-00	TUNER (UV1315) (KV-21M1L/21T1L) TUNER (BT-AU601) (KV-21M1U/21T1U)
V901	A	8-738-786-71 8-451-295-45 8-738-784-05	ITC DEFLECTION YOKE (Y21PFA2BA) PICTURE TUBE (SD-169) (A51JXH61X)

DESCRIPTION

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	ACCESSORIES AND PACKING MATERIALS				÷		
	1-770-783-11	CONNECTOR, CONVERSION	w1v/21m1v/21m1v)				
	4-203-438-41	MANUAL, INSTRUCTION (KV	M1K/21T1K/21T1R) -21M1A/21T1A) (ITALIAN)				
	4-203-438-51	MANUAL, INSTRUCTION (KV	-21M1B/21T1B) AN/GERMAN/DUTCH)				
	4-203-438-11	MANUAL, INSTRUCTION (KV (ENGLISH/DANISH/S GREEK/DUTCH/TUF	7-21M1D/21T1D) WEDISH/FINNISH/				
	4-203-439-11	MANUAL, INSTRUCTION (KV	-21M1D/21T1D) (GERMAN/ENGLISH)				
	4-203-438-71	MANUAL, INSTRUCTION (KV					
	4-203-438-81	MANUAL, INSTRUCTION (KV					
	4-203-440-91	(HUNGARIAN/POLIS	H/CZECH/ENGLISH/				
	4-203-438-61	RUSSIAN/BULGARI MANUAL, INSTRUCTION (KV-21M1L/21T1L/21M1U/21	•				
	4-203-441-91	MANUAL, INSTRUCTION (KV (RUSSIAN/BU	-21T1R) LGARIAN/ENGLISH)				
	*4-042-477-01	BAG, PROTECTION (KV-21M1A/21T1A/21M1B/21 21M1E/21T1E)	T1B/21M1D/21T1D/				
	*4-039-905-02	BAG, PROTECTION (KV-21M1K/21T1K/21M1L/21 21T1U)	T1L/21T1R/21M1U/				
	*4-203-447-01	INDIVIDUAL CARTON (KV-21M1A/21T1A/21M1B/21 21M1E/21T1E)	T1B/21M1D/21T1D/				
	*4-203-477-11	INDIVIDUAL CARTON (KV-21M1K/21T1K/21	M1L/21T1L/21T1R)				
	*4-203-446-01	INDIVIDUAL CARTON (KV-2					
	*4-203-444-01	CUSHION (LOWER) (ASSY) (KV-21M1A/21T1A/21M1B/21 21M1E/21T1E)	T1B/21M1D/21T1D/				
•	*4-203-444-11	CUSHION (LOWER) (ASSY) (KV-21M1K/21T1K/21M1L/21 21T1U)	T1L/21T1R/21M1U/				
	*4-203-445-01	CUSHION (UPPER) (ASSY) (KV-21M1A/21T1A/21M1B/21	T1B/21M1D/21T1D/				
	*4-203-445-11	21M1E/21T1E) CUSHION (UPPER) (ASSY) (KV-21M1K/21T1K/21M1L/21 21T1U)	T1L/21T1R/21M1U/				
REMOTE COMMANDER							
	1-473-194-11	COMMANDER, STANDARD TYP	E (RM-836)				
*****	*******	*************	******				

SERVICE MANUAL

BE-4A CHASSIS

CHASSIS NO.
SCC-J03J-A
SCC-J03G-A
SCC-J02D-A
SCC-J02C-A
SCC-J03H-A
SCC-J01E-A
SCC-J01D-A

SUPPLEMENT - 1

SUBJECT: CHANGE OF PART NUMBER

File this supplement with the service manual

INTRODUCTION: Change of Part Number due to Beznet Assy

NOTE: This Supplement applies to the following models:-KV-21M1K, KV-21T1K, KV-21T1R

- SECTION 5 DIAGRAMS
 - (A board, Page 31) See page 2 (C board, Page 35) See page 5
- SECTION 6 EXPLODED VIEWS

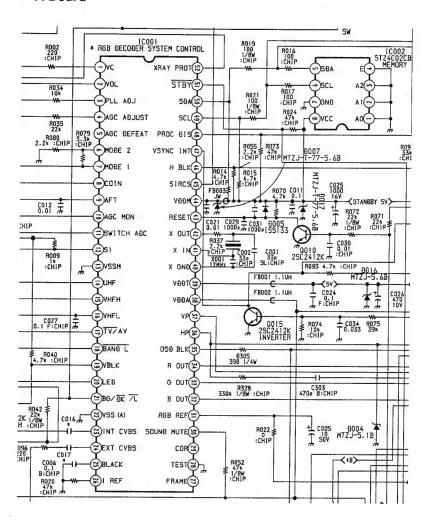
6-1. CHASSIS (Page 38)..... See page 6

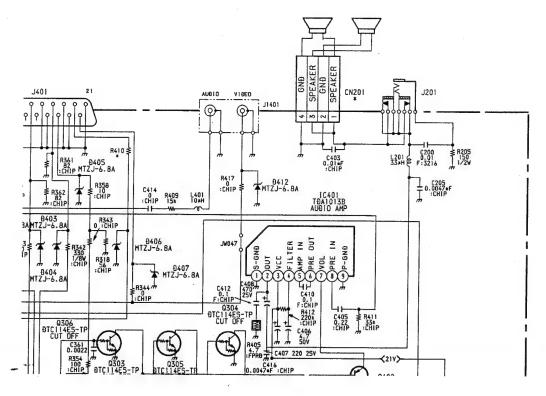
• SECTION 7 ELECTRICAL PARTS LIST (Page 40) See page 7

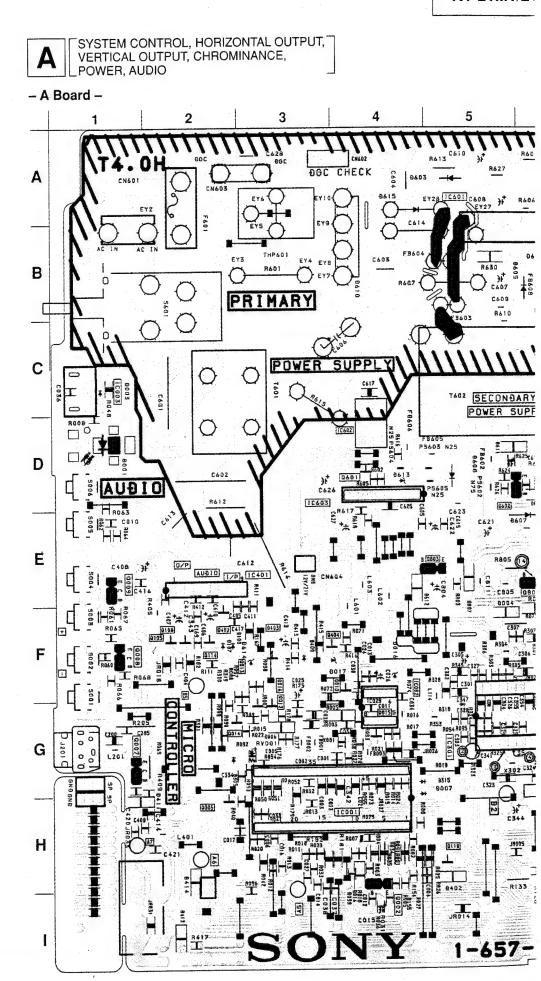




- A Board -



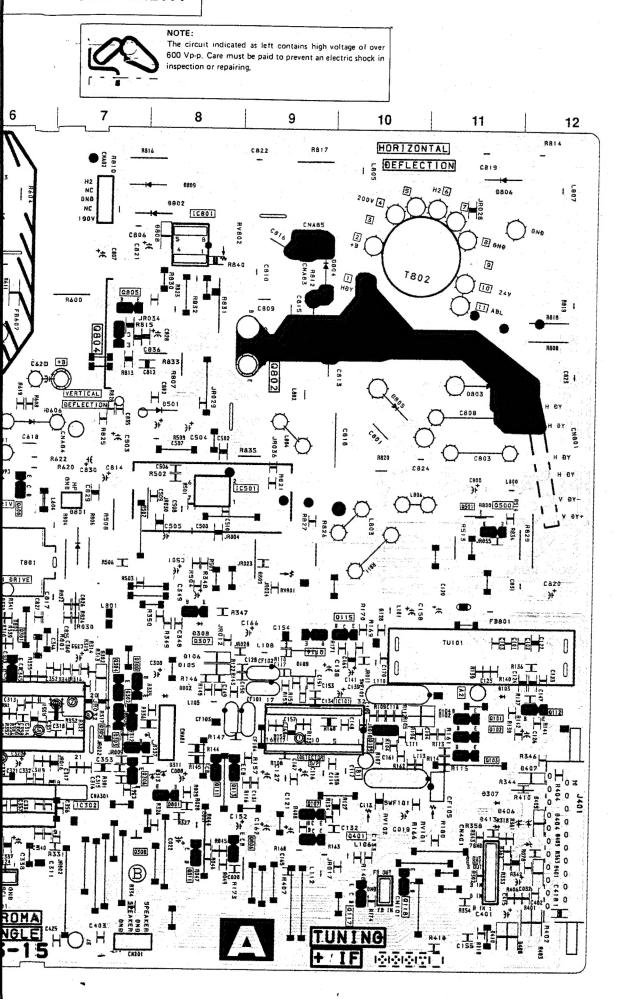




CHROMA

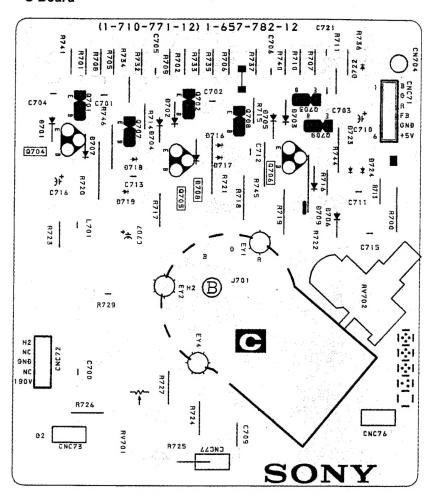
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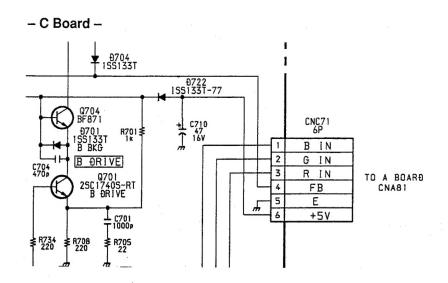
TUNING





- C Board -





SECTION 6

EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they
 are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.
- Items marked "* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

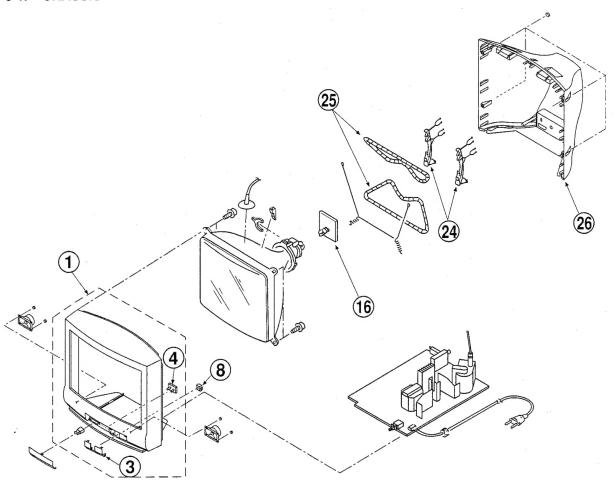
The components identified by shading and marked \triangle are critical for safety.

Replace only with the part number specified.

Les composants identifies par une trame et une marque 1. sont critiques pour la securite.

Ne les remplacer que par une piece portant le numero specifie.

6-1. CHASSIS



ref no	PART NO	DESCRIPTION	REMARK	REF NO	PART NO	DESCRIPTION	REMAR
1	X-4200-267-2	BEZNET ASSY					
i	4-203-432-11	WINDOW					
ί	*4-203-431-11	GUIDE, LIGHT					
	4-203-433-11	BUTTON, POWER					
Ĺ6	*A-1638-068-A	C BOARD, COMPLETE					
4	*4-386-622-01	BAND, DGC					
25		COLD DECAUSSING	1.23				
26	4-203-437-02	COVER (REAR)					
	1 200 407 02	· · · · · · · · · · · · · · · · · · ·					
	-		,				
			2.	· ·			
-							

SECTION 7 ELECTRICAL PARTS LIST

When indicating parts by reference number, please include the board name.

CAPACITORS

COILS

 $\mathrm{MF}:\mathrm{mF},\mathrm{PF}:\mathrm{mmF}$

 \mbox{MMH} : \mbox{mH}, \mbox{uH} : \mbox{mH}

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
 RESISTORS
- · All resistors are in ohms
- F: nonflammable

• r: nontammable								
REF NO	PART NO DESCRIPTION		REMARK	REF NO	PART NO	DESCRIPTION		REMARK
*A BOARD, COMPLETE				*A-1638-068-A C BOARD, COMPLETE				
	< CAPACITOR >				<	DIODE >		
C016 C017	NOT USED (KV-21M1K) NOT USED (KV-21M1K)			D722	8-719-991-33	DIODE ISS133T	-77	
C034 C106	1-130-489-00 FILM NOT USED	0.033MF 20	% 50V		<	RESISTOR >		
C107	NOT USED			R724	1-260-117-11	CARBON	33K 10%	1/2W
C205 C361 C403 C409	1-163-017-00 CERAMIC CHIP 1-164-161-11 CERAMIC CHIP 1-163-031-11 CERAMIC CHIP NOT USED	0.0022MF 5%	50V	******	******	*******	******	******
C416	1-163-017-00 CERAMIC CHIP	0.0047MF 5%	50V					
	< FILTER >							
CF102	1-409-327-00 TRAP, CERAMIC	(KV-21M1K)						
	< DIODE >							
D007 D016 D017	8-719-109-89 DIODE MTZJ-T- 8-719-109-89 DIODE MTZJ-T- 8-719-109-89 DIODE MTZJ-T-	-77-5.6B						
	< IC >							
IC001 IC002	8-759-452-21 IC SAA5290ZP/ 8-759-452-19 IC SAA5288ZP/ 8-759-452-20 IC SAA5290ZP/ 8-759-251-04 IC ST24C02FB6	024 (KV-21MIK 054 (KV-21TIR	j					
IC003	8-742-014-10 IC SBX1981-51							
< RESISTOR >								
JW101	NOT USED							
R122 R143	1-216-025-00 METAL GLAZE NOT USED (KV-21T1K, KV-21M1		1/10W					
R318 R358 R401	1-216-021-00 METAL GLAZE 1-216-001-00 METAL GLAZE 1-216-049-00 METAL GLAZE	68 5% 10 5% 1K 5%	1/10W 1/10W 1/10W					
R808 R818	1-260-114-11 CARBON 1-260-115-11 CARBON	18K 22K	1/2W 1/2W					